

***Catalog of
Space Shuttle Earth Observations
Hand-Held Photography***

Space Transportation System (STS) 41-G Mission



Space Shuttle Earth Observations Project

July 1985



National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston Texas 77058

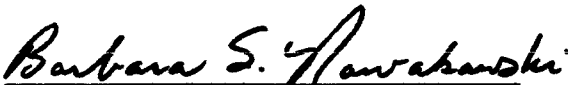
Cover Photograph
(S17-120-056)

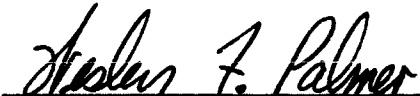
Seen from an altitude of 350 km (190 n. mi.), the Levantine Rift Valley slices north-south through the Middle East. Rift faulting connects the Dead Sea and Sea of Galilee, but northward in Lebanon the rifting splays out into a series of north-northeast trending faults. East of the rift are two large lava fields about which little is known. This region was also photographed by the Large Format Camera that flew on the 41-G mission, as well as by the Linhof camera that took this picture.

CATALOG OF SPACE SHUTTLE EARTH OBSERVATIONS HAND-HELD PHOTOGRAPHY
SPACE TRANSPORTATION SYSTEM (STS) 41-G MISSION

Job Order 69-210

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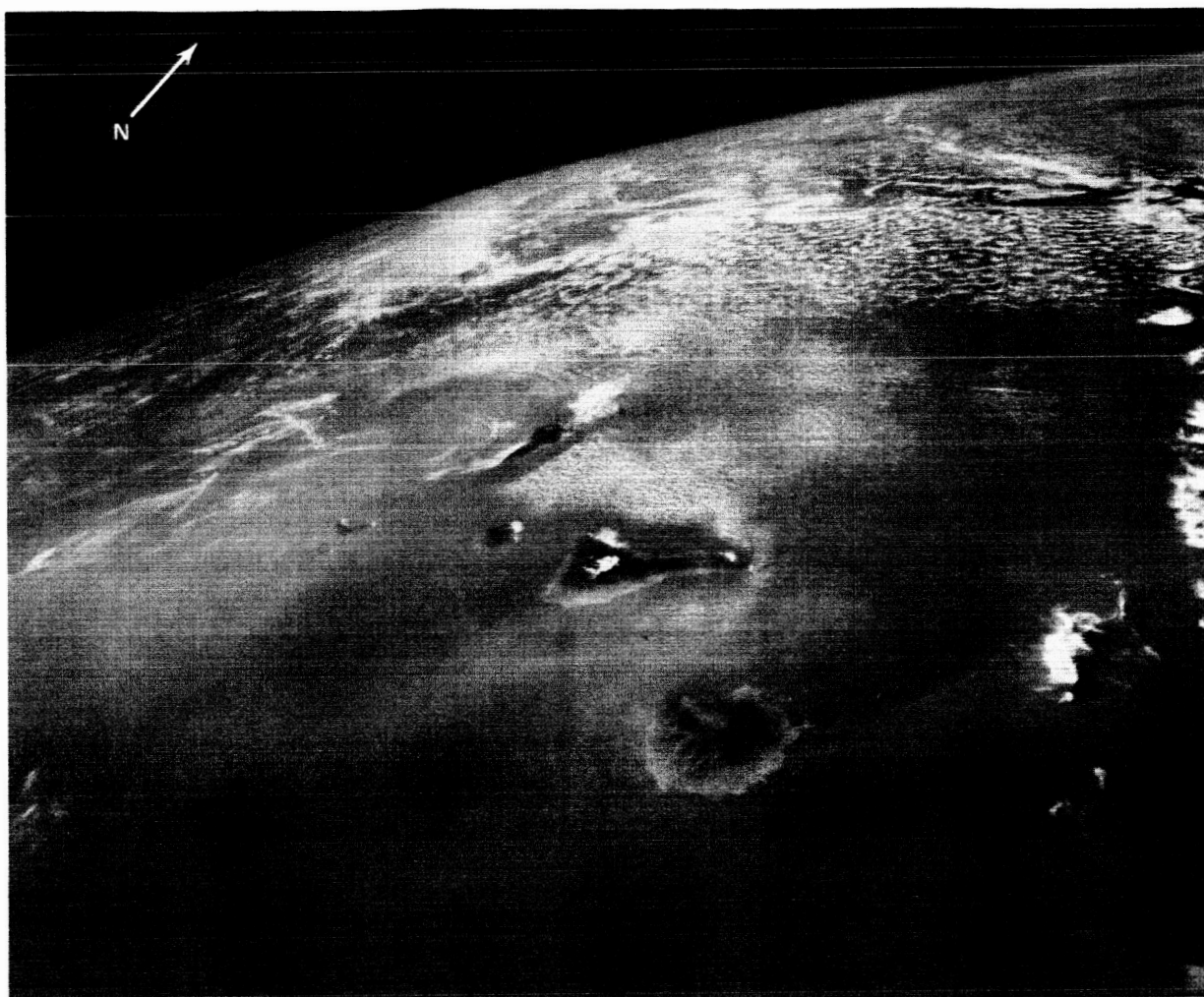
July 1985

LEMSCO-21761

FOREWORD

The crew of the STS 41-G mission took more than 2400 photographs of Earth with their Hasselblad and Linhof cameras. To illustrate the distinctive quality and character of the photography of Earth and its environment as captured by the crew, nine photographs have been selected and reproduced on the following pages with brief descriptions of geologic features and various phenomena.

Although the photographs are reproduced in black and white, the originals are in natural color and provide a wide range of hue, saturation, and brightness.



S17-121-169

Photography from the Space Shuttle missions is increasing our knowledge of the frequency, extent, and duration of very large trans-Atlantic duststorms. Those dust palls emanating from the Sahara Desert and the Sahelian regions of Africa sweep westward as far as North America. In this instance, a large duststorm from Algeria and Morocco is moving offshore across the Canary Islands (28° N., 17° W.) into the Atlantic. Recently, the lee wakes in the dust shield have been noted in previous photography on the west sides of both the Canary Islands and the Cape Verde Islands (16° N., 24° W.).



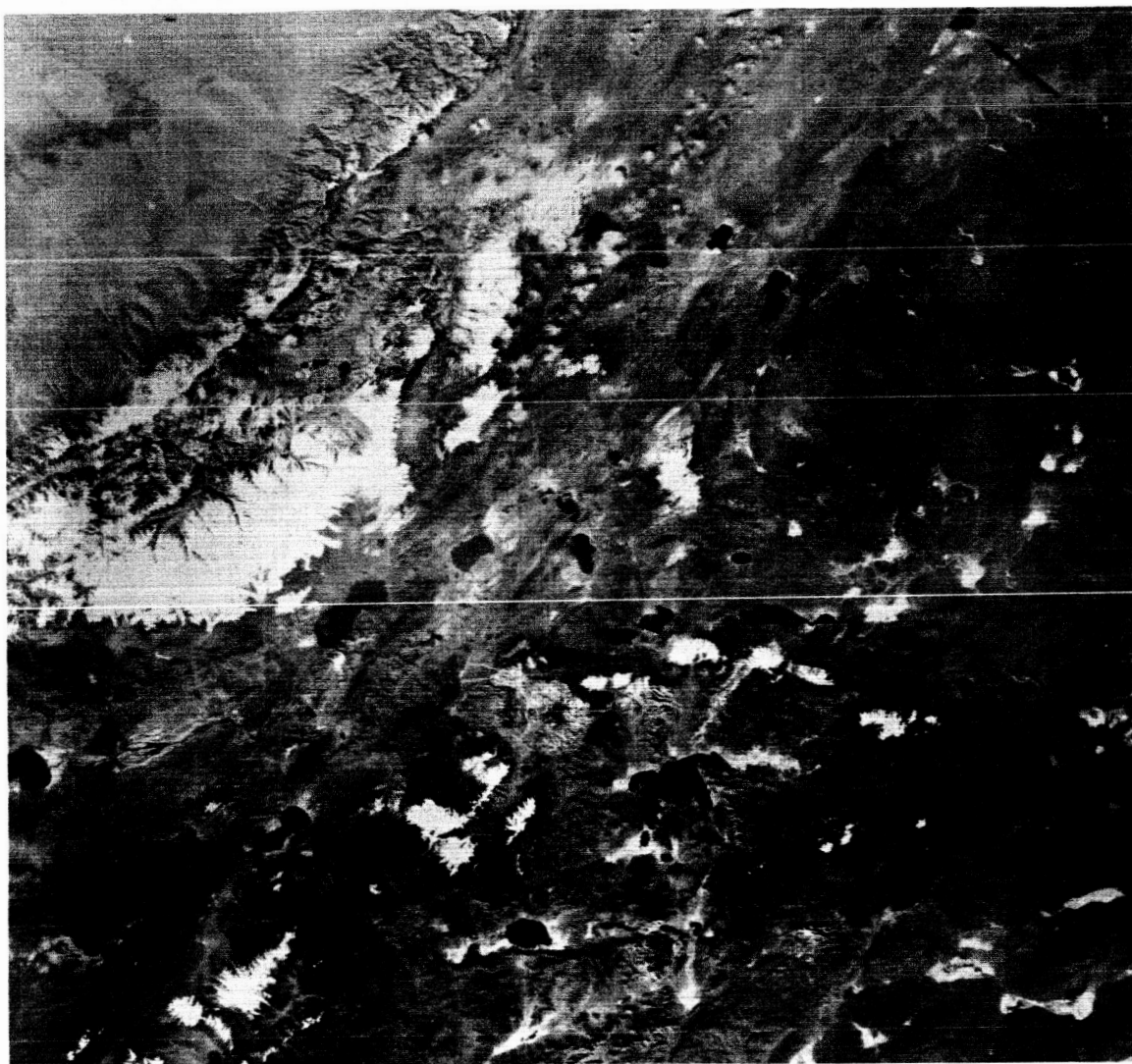
S84-17-33-043

Aniakchak caldera (56.9° N., 158.2° W.) is an 11-km-wide, steep-walled volcano midway along the Alaska Peninsula. The original cone collapsed to form the caldera approximately 3500 years ago, and a broad ashflow sheet traveled outward nearly 50 km. This Hasselblad view, which was taken with the 250-mm lens, clearly shows both a cinder cone and a lake on the caldera floor. The last certain eruption in May 1931 deposited 0.6 cm of dark ash as far away as 200 km.



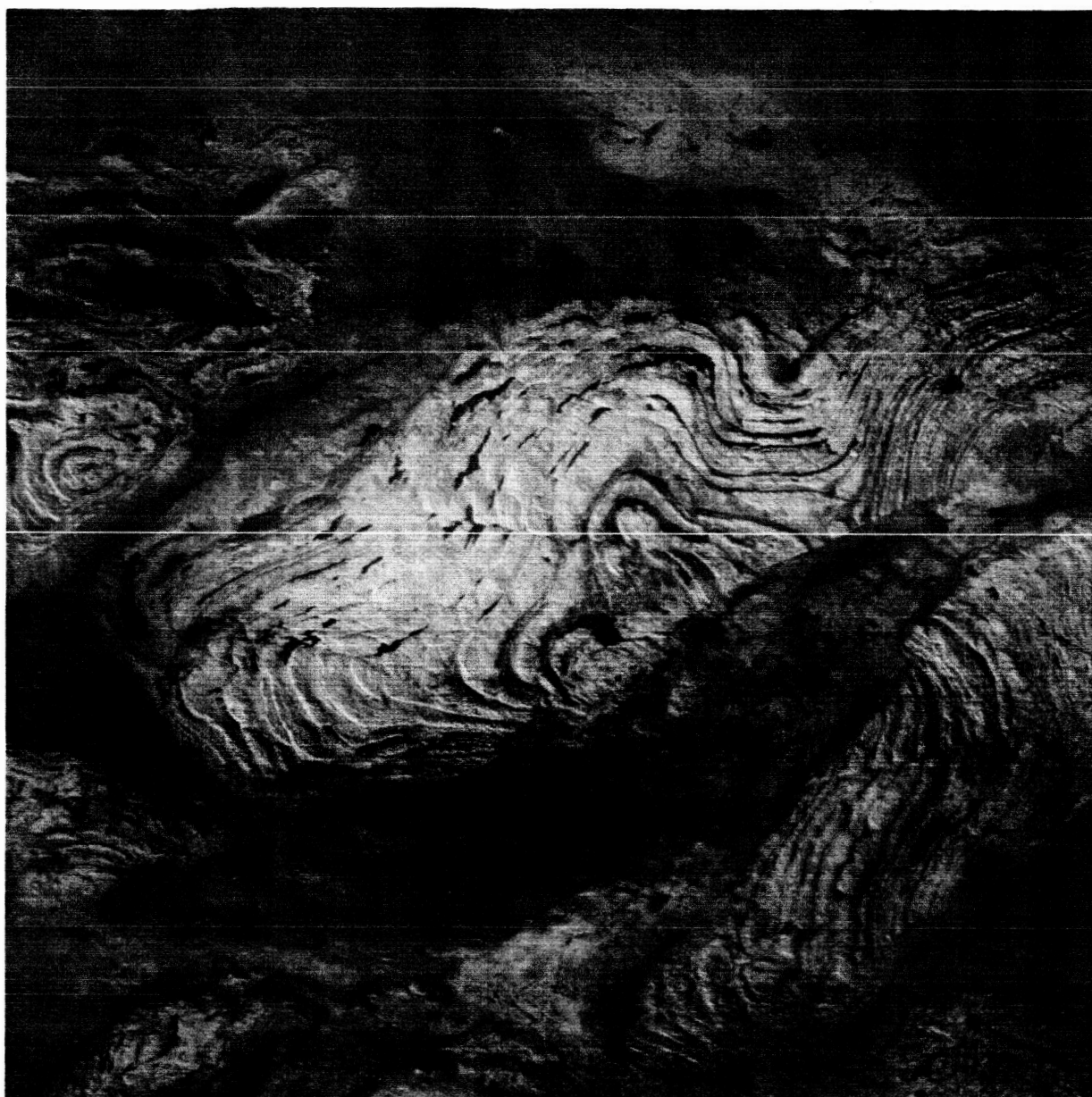
S84-17-34-098

This photograph captures a set of internal wave forms progressing through the Strait of Gibraltar into the western Mediterranean Sea. The changes in reflectance are a perfect indicator of changes in sea surface roughness. These internal "solitons" are induced by the main temperature/density discontinuity at a depth of 50 m. It is estimated that their amplitudes are on the order of tens of meters, yet there is negligible surface amplitude. The variations in surface texture allow us to see these waves transiting at depth.



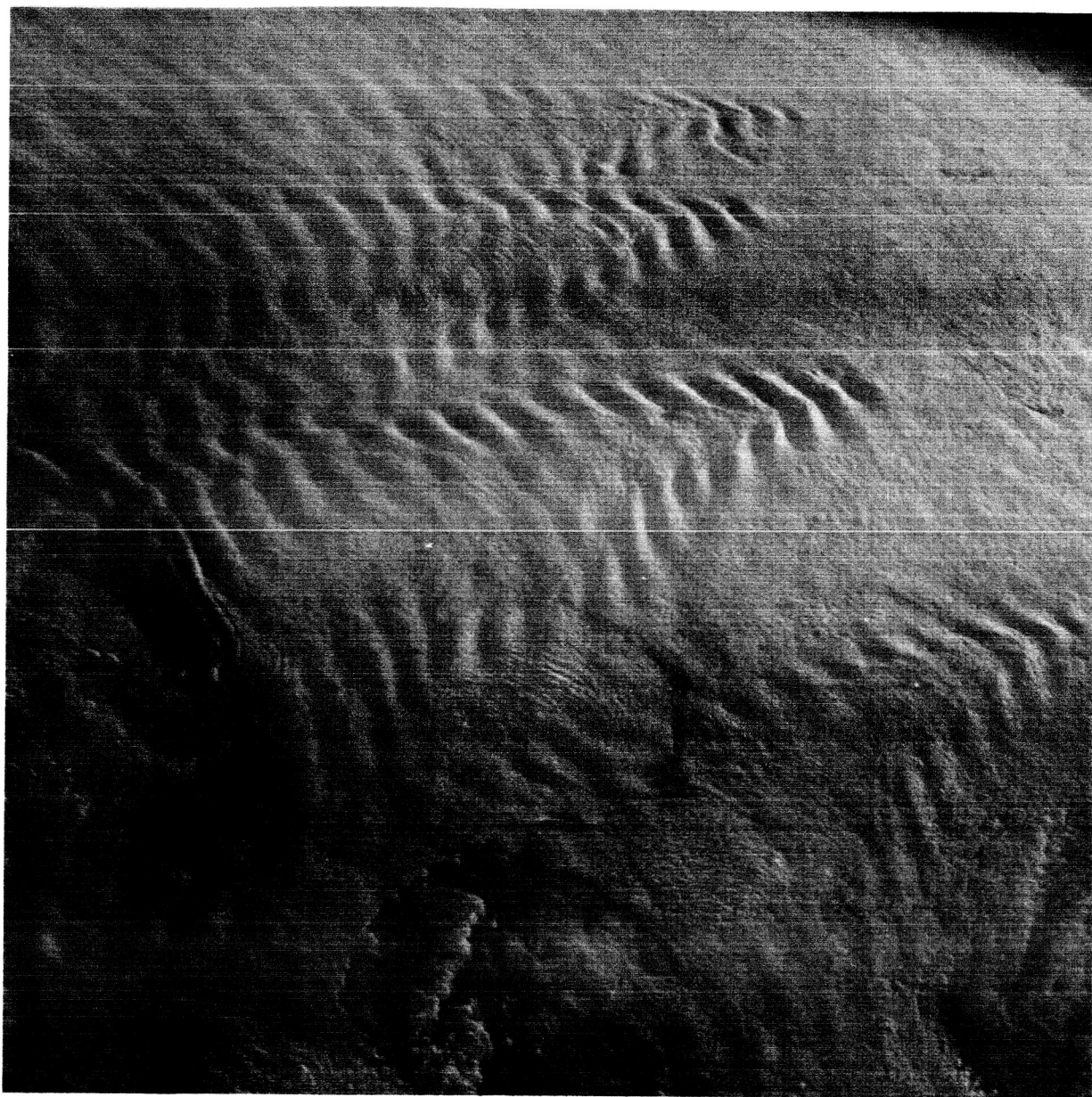
S17-120-010

The almost unexplored region of the northwestern Tibetan Plateau (34.5° N., 81.5° E.) was photographed with the Linhof Aero Technika camera using the 90-mm lens. The broad regional view provides evidence of the geological complexity of Tibet. In the upper left corner of the image, the Tarim Basin and the Cholpanglik portion of the Kunlun Mountains form the northern boundary of the plateau. Across the 5000-m-plus high plateau are many basins with internal drainage which contained very large lakes during the last ice age, as indicated by paleoshorelines at altitudes more than 100 m above the present lake surfaces. Of tectonic interest is an unnamed strike-slip fault that runs diagonally across the frame parallel to the base of the Kunlun Mountains. The colors of the original photograph indicate several areas of possible volcanism and hydrothermally altered surfaces. These areas in the region are poorly mapped.



S84-17-47-059

The Precambrian shield region of northeastern Canada (56° N., 68° W.) preserves an example of ancient mountain-building perhaps resulting from the collision of two ancestral continental plates. The Labrador fold belt is an important zone for mineral exploration and a major center for the mining of iron ore. A low sun elevation and frosting of snow serve to accentuate the folded sedimentary strata and younger faults disrupting the tectonic fabric. This photograph was taken with a 250-mm lens.

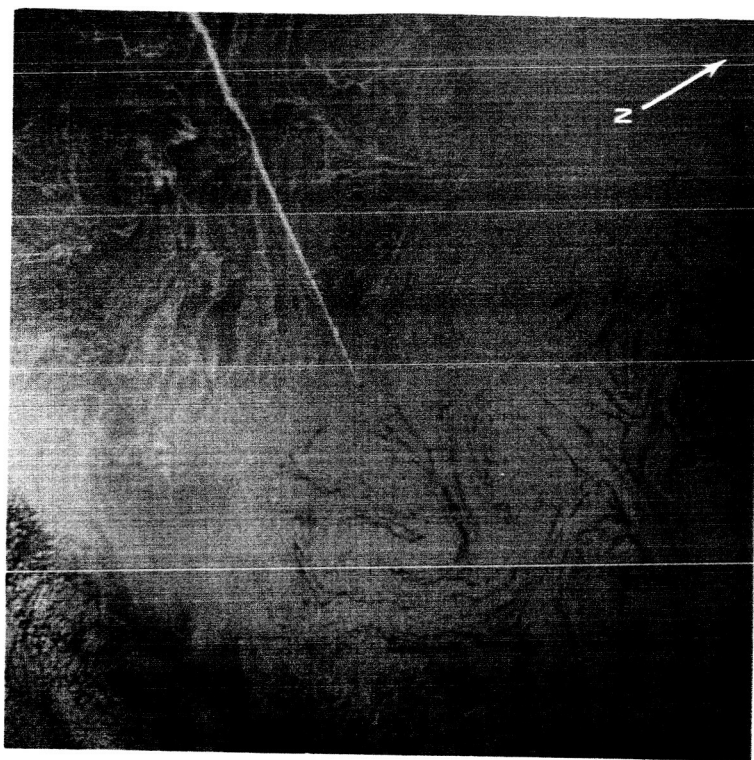


S84-17-45-114

This 100-mm low-oblique view (looking west from 56° S., 21° W.) was taken of a cloud shield as it passed over the South Sandwich Islands. The low sun angle enhances the kelvin wakes seen here for 4 of the 11 islands in the group. These volcanic islands with elevations to 1395 m perturb the otherwise unimpeded flow of circum-Antarctic cyclones in the latitudinal band of 55° to 65° S.

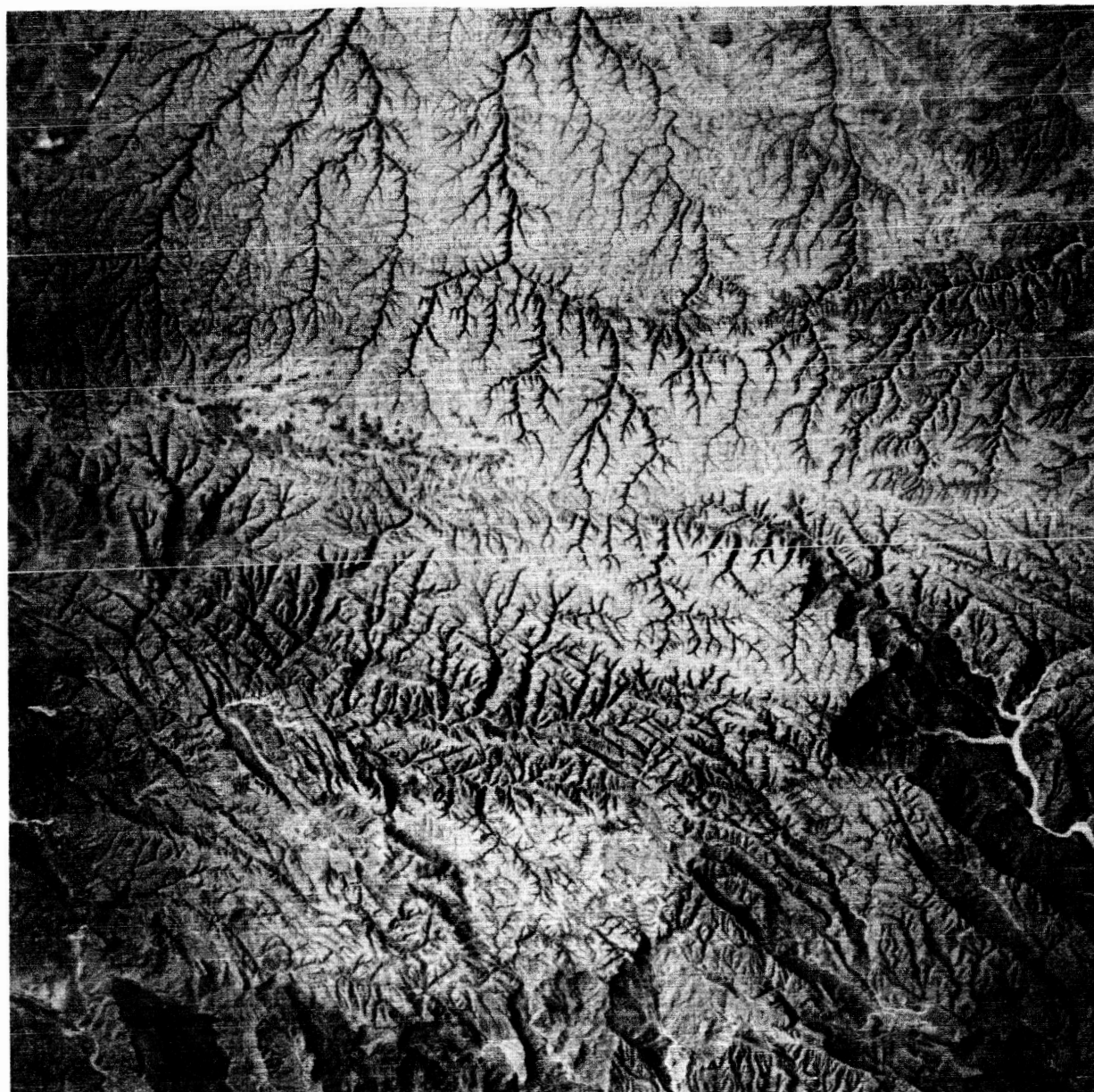


S84-17-38-063



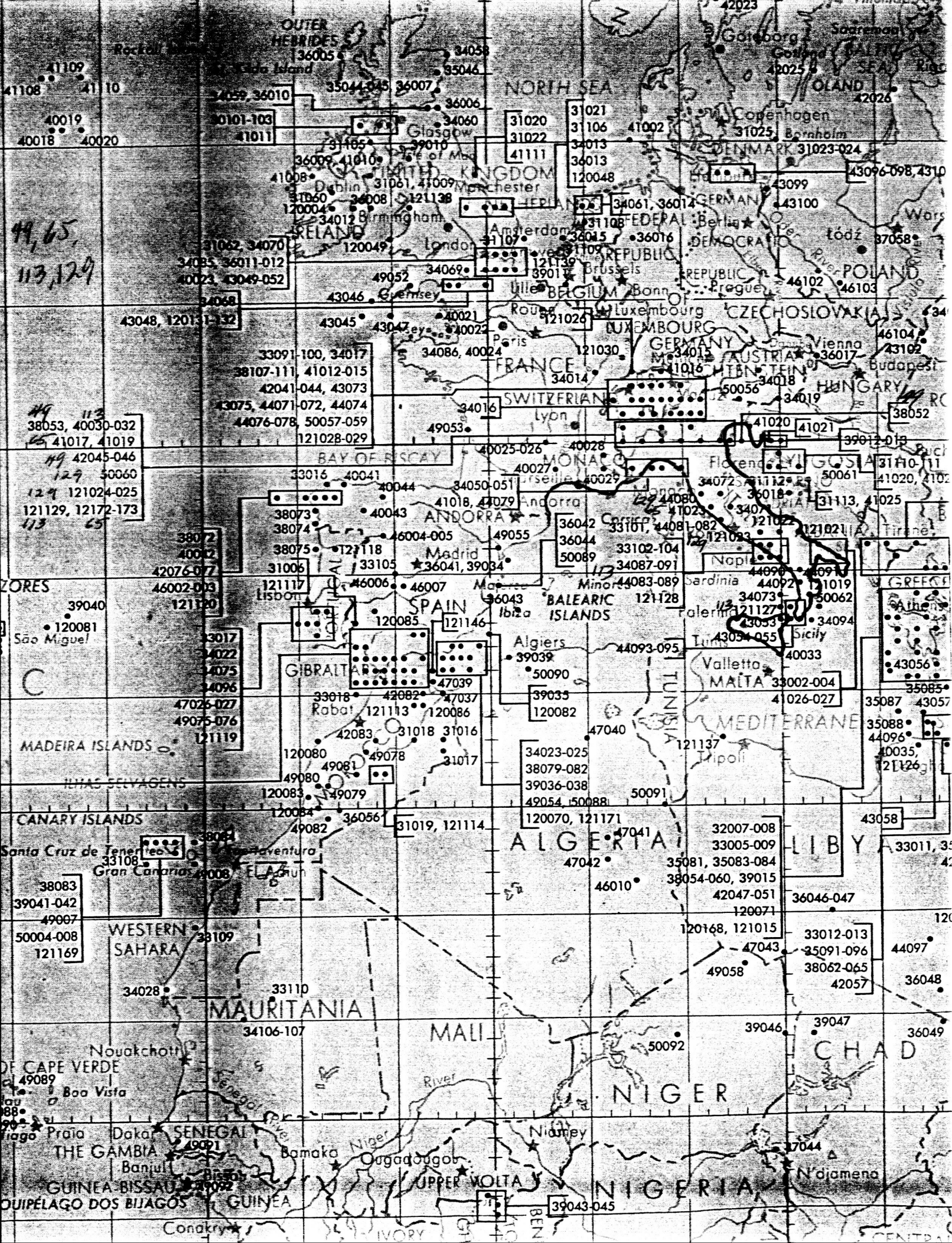
S84-17-38-062

These photographs highlight a large ship wake in the central Mediterranean Sea. The unique reflectance is similar to oil slicks seen in various oceans of the world. It is apparent that this ship is pumping a mixture of bilge water and oil overboard. With the glitter point off the center of the photograph in frame 063, the wake appears dark in relation to the surrounding ocean. A few seconds earlier (frame 062), with the glitter directly over the ship, the oil surfactant calms the wake water, providing a bright, specular reflection.



S84-17-36-037

This Hasselblad photograph, taken with the 250-mm lens, illustrates the consequences of the continuing rift faulting of the Gulf of Aden upon drainage on the Hadramaut Plateau of South Yemen (15° N., 48.5° E.). The dry river courses (wadis), which during wetter periods flowed into the interior of the Arabian Peninsula, have subsequently become structurally reoriented by normal faulting parallel to the Gulf of Aden. A fine example of stream piracy is seen along the ephemeral river eroding a course down a fault-bounded valley from the right of the photograph toward the center of the frame.



PREFACE

This document catalogs Space Shuttle hand-held Earth observations photography which was acquired during the Space Transportation System (STS) 41-G mission in October 1984. This catalog is a product of the Space Shuttle Earth Observations Project, Solar System Exploration Division, Space and Life Sciences Directorate, of the National Aeronautics and Space Administration (NASA), Lyndon B. Johnson Space Center (JSC). Contractor support has been provided by Lockheed Engineering and Management Services Company, Inc., Houston, Texas, under Contract NAS 9-15800.

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ACRONYMS

GMT	Greenwich Mean Time
JSC	Lyndon B. Johnson Space Center
NASA	National Aeronautics and Space Administration
OV	Orbiter Vehicle
SSEOP	Space Shuttle Earth Observations Project
STS	Space Transportation System
USN	United States Navy

1. INTRODUCTION

The Space Shuttle Earth Observations Project (SSEOP) was created to support the acquisition of Earth observations photography by Shuttle astronauts. Early activity included the formation of an Earth science investigative team to aid in the definition of photographic requirements. Project personnel coordinate and provide crew training in the Earth sciences, provide real-time support during missions, and catalog and disseminate data.

Before the launch of each Space Shuttle mission, the crew is trained in the use of basic photographic techniques, provided with manuals depicting particular sites of scientific interest, and given general briefings on the Earth sciences, including geology, oceanography, and meteorology. In each phase of training, examples of previous manned-orbital photography play an important role. These photographs aid in the description and understanding of significant physical features and also help crewmembers learn reconnaissance cues for the identification and location of noteworthy features viewed from orbit.

During each mission, project personnel monitor the Earth for special interest events, such as hurricanes and other major storms, floods, ice packs, fires, active volcanoes, and pollution problems. Special requests are forwarded to the crew through Mission Control. After the mission the geographic location and general quality of each frame are determined and reported in catalogs such as this.

2. ACQUISITION OF EARTH OBSERVATIONS PHOTOGRAPHY

The photography described in this catalog was collected using two types of cameras. NASA-modified Hasselblad 500 EL/M 70-mm cameras (fig. 2-1) were equipped with Zeiss 50-mm CF Distagon 4.0, 100-mm CF Planar 3.5, and 250-mm CF Sonnar 5.6 lenses. Kodak Ektachrome 64 Professional 5017 film was used in the two Hasselblad cameras. A Linhof Aero Technika 45 camera (fig. 2-2) was equipped with interchangeable Linhof 90-mm Super Angulon 5.6 and 250-mm Tele-Arlon 5.6 lenses. The film used for this camera was 5-in. Kodak Ektachrome 64 Professional film 5017. All the windows of the Shuttle Orbiter (fig. 2-3) were employed in the collection of the photographs.

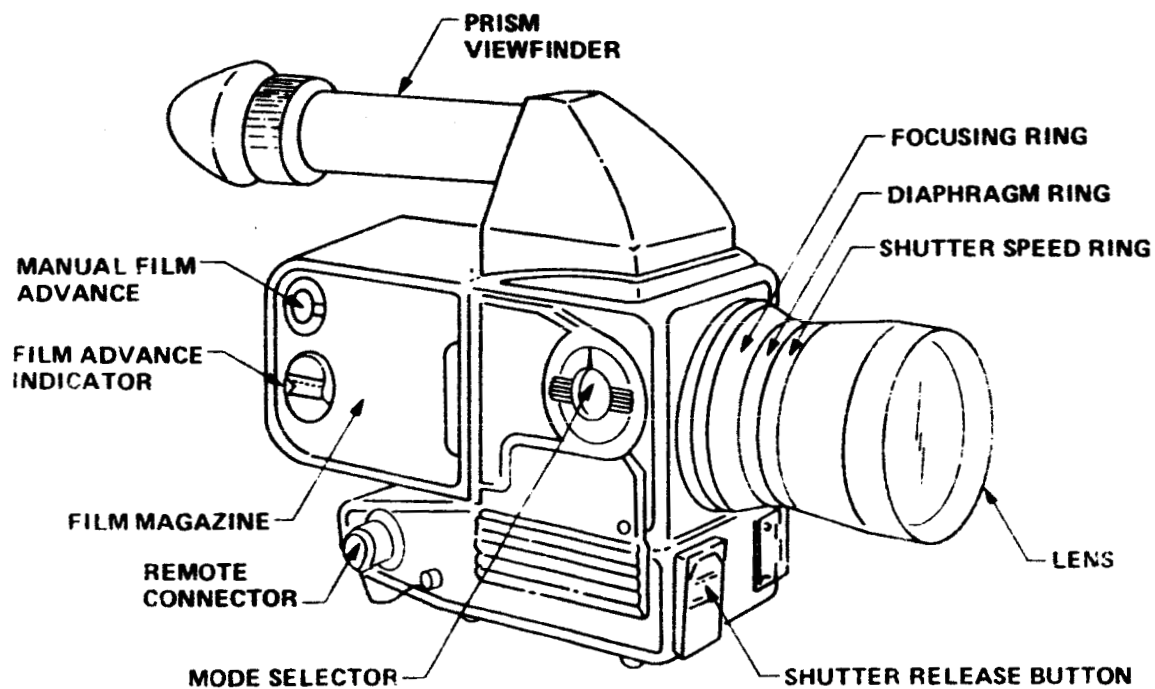
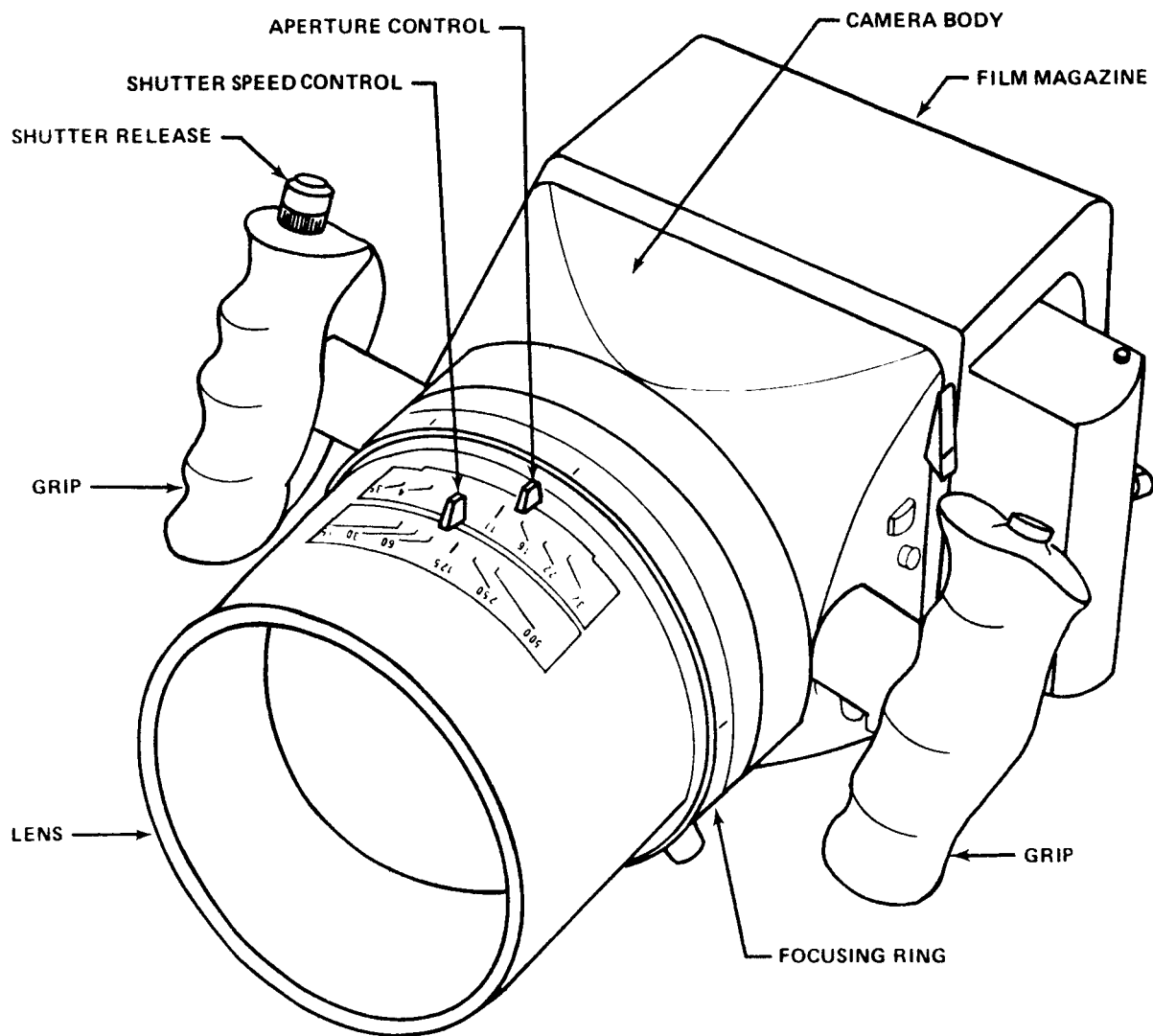


Figure 2-1.- NASA-modified Hasselblad 500 EL/M camera.



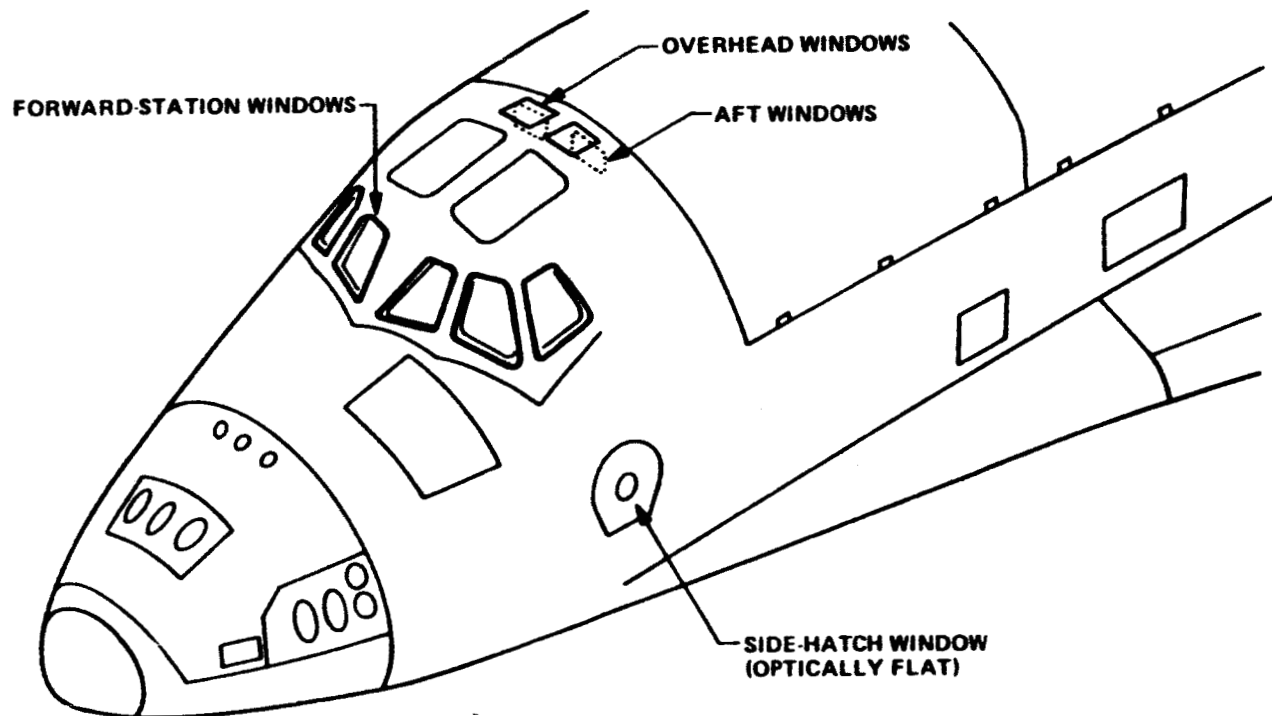


Figure 2-3.- Location of windows in the Shuttle Orbiter.

3. ORDERING PHOTOGRAPHY

Earth-viewing photography may be obtained from the following sources:

U.S. Geological Survey
EROS Data Center
Sioux Falls, SD 57198
Telephone: (605) 594-6151

Technology Applications Center
University of New Mexico
Albuquerque, NM 87131
Telephone: (505) 277-3622

NOTE

The Hasselblad photography from the STS 41-G mission was numbered using the year, STS flight number, and roll and frame numbers. For example, S84-17-36-037 is the number for frame 37 of roll 36 from flight 17 which was flown in 1984. The data recording system frame number resets to zero for each new roll; therefore, frame numbers are not unique to a specific roll. The Linhof frames have roll numbers of 120 and 121 only, and the photography was numbered without the year included (e.g., S17-120-056) and must be ordered accordingly.

APPENDIX A

STS 41-G EARTH OBSERVATIONS PHOTOGRAPHY

TABLE A-1.- MISSION DATA FOR STS 41-G

Launch:	October 5, 1984, 11:03:00 GMT
Landing:	October 13, 1984, 16:26:33 GMT
Orbits:	133
Vehicle:	Challenger (OV-099)
Initial Orbit Altitude:	190 n. mi.
Inclination:	57°
Crew:	Commander - Robert L. Crippen Pilot - Jon A. McBride Mission Specialists - Dr. Sally K. Ride Dr. Kathy D. Sullivan David C. Leestma Payload Specialists - Paul Scully-Power Dr. Marc Garneau

TABLE A-2.- EXPLANATION OF COLUMN HEADINGS USED IN TABLES A-3 AND A-4

ROLL

Number assigned to each roll of film

FRAME

Image number

GEO-NAME

Usually the country where the center point of the photograph is located; may also be the name of an island chain, ocean, sea, or a single island if this is the only land in the photograph

FEATURE

Feature of interest within the photograph (e.g., name of a specific landform, cloud pattern, etc.)

CENTER POINT LAT, LON

Latitude and longitude of the center point of photograph determined to nearest half degree

NADIR LAT, LON

Coordinates, recorded to the nearest tenth of a degree by the data recording system, representing the point directly beneath the spacecraft rather than the center point of the photograph (used only when center point cannot be plotted)

CC%

Percentage of cloud cover

DR

Look direction:

N - North
NE - Northeast
NW - Northwest
S - South
SE - Southeast
SW - Southwest
E - East
W - West

TL

Tilt of the camera from Shuttle nadir:

HO - High oblique (includes the horizon)
LO - Low oblique
NV - Near vertical

FL

Focal length of lens used:

50 mm
90 mm
100 mm
250 mm

E

Photographic exposure:

O - Overexposed
N - Normal exposure
U - Underexposed
F - Focus problems

S

Possibility of a stereopair:

N - No
Y - Yes

TABLE A-2.- EXPLANATION OF COLUMN HEADINGS USED IN TABLES A-3 AND A-4
(Concluded)

DATE

Year and Julian day the
photograph was taken

GMT

Greenwich mean time of
photographic acquisition

ALT

Shuttle altitude in nautical
miles

AZI

Inertial azimuth of Shuttle
measured clockwise from north

ELE

Sun elevation angle at Shuttle
nadir

ORB

Orbit number

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	POINT LAT	POINT LON	NAOIR LAT	NAOIR LON	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NAOIR AZI	ELE	ORB
31	2	CANADA-NWT	BELCHER ISLANDS	56.0N	79.0W	55.9N	77.2W	50 W	L	O	50	N	N	84	279	14:22:24	197	75	21	3
31	3	CANADA-Q	CLEARWATER LAKE	56.0N	74.5W	56.1N	75.8W	60 W	L	O	50	N	N	84	279	14:22:36	197	77	21	3
31	4	CANADA-Q	HUDSON & JAMES BAYS	54.0N	63.0W	56.8N	69.5W	70 SW	H	O	50	N	N	84	279	14:23:33	197	82	23	3
31	5	CANADA-Q	QUEBEC & ONTARIO	56.0N	75.0W	56.9N	67.4W	70 SW	H	O	50	N	N	84	279	14:23:51	197	84	24	3
31	6	SPAIN	PORTUGAL/SPAIN/ATLANTIC	38.0N	7.0W	44.7N	13.0W	80 SE	H	O	50	N	N	84	279	14:33:12	196	130	34	3
31	7	SPAIN	PORTUGAL/SPAIN/ATLANTIC	38.0N	5.5W	42.8N	10.2W	80 SE	H	O	50	N	N	84	279	14:33:56	195	132	34	3
31	8	MOROCCO	STRAIT OF GIBRALTAR	35.5N	6.5W	41.6N	8.4W	80 SE	H	O	50	N	N	84	279	14:34:25	195	133	34	3
31	9	MOROCCO	STRAIT OF GIBRALTAR	35.5N	5.5W	40.5N	7.1W	80 SE	H	O	50	N	N	84	279	14:34:48	195	134	34	3
31	10	MOROCCO	STRAIT OF GIBRALTAR	35.5N	5.0W	39.5N	5.8W	60 SE	H	O	50	N	N	84	279	14:35:10	195	135	34	3
31	11	MOROCCO	STRAIT OF GIBRALTAR	36.0N	4.5W	38.8N	5.1W	60 S	H	O	50	N	N	84	279	14:35:23	195	135	34	3
31	12	MOROCCO	STRAIT OF GIBRALTAR	36.0N	5.0W	38.1N	4.2W	60 SW	H	O	50	N	N	84	279	14:35:40	195	136	34	3
31	13	MOROCCO	STRAIT OF GIBRALTAR	35.5N	5.0W	37.3N	3.4W	60 SW	H	O	50	N	N	84	279	14:35:56	194	136	34	3
31	14	MOROCCO	STRAIT OF GIBRALTAR	35.5N	5.0W	36.9N	2.9W	60 SW	H	O	50	N	N	84	279	14:36:4	194	137	34	3
31	15	MOROCCO	STRAIT OF GIBRALTAR	35.5N	6.0W	36.1N	2.1W	60 SW	H	O	50	N	N	84	279	14:36:21	194	137	34	3
31	16	MOROCCO	POINT SOURCE DUST STORM	33.0N	2.5W	35.8N	1.8W	20 SW	H	O	50	N	N	84	279	14:36:27	194	137	34	3
31	17	MOROCCO	POINT SOURCE DUST STORM	32.5N	2.5W	35.0N	0.9W	10 SW	H	O	50	N	N	84	279	14:36:44	194	138	34	3
31	18	MOROCCO	POINT SOURCE DUST STORM	33.0N	4.0W	34.6N	0.5W	50 SW	H	O	50	N	N	84	279	14:36:53	194	138	34	3
31	19	MOROCCO	POINT SOURCE DUST STORM	31.5N	6.0W	34.3N	0.3W	40 SW	H	O	50	N	N	84	279	14:36:58	194	138	34	3
31	20	ENGLAND	THE WASH	54.0N	0.5W	55.1N	0.8W	50 S	L	O	100	N	N	84	280	8:40:21	197	71	17	15
31	21	ENGLAND	THE WASH	53.0N	0.0	55.4N	0.5E	60 S	L	O	100	N	N	84	280	8:40:34	197	73	18	15
31	22	ENGLAND	THE WASH	54.0N	0.5W	55.8N	1.7E	60 SW	L	O	100	N	N	84	280	8:40:45	197	74	18	15
31	23	POLAND	BALTIC SEA/GRAVITY WAVES	55.0N	16.0E	57.0N	14.9E	30 S	L	O	100	N	N	84	280	8:42:43	197	85	22	15
31	24	POLAND	BALTIC SEA/GRAVITY WAVES	55.0N	16.0E	57.0N	15.6E	30 S	L	O	100	N	N	84	280	8:42:49	197	86	23	15
31	25	POLAND	BALTIC SEA/GRAVITY WAVES	55.0N	15.0E	57.1N	17.7E	40 SW	L	O	100	N	N	84	280	8:43:7	197	87	23	15
31	26	USSR	RYBINSKOYE RESERVOIR	58.5N	38.5E	55.9N	36.4E	15 NE	L	O	100	N	N	84	280	8:45:52	197	104	28	15
31	27	USSR	RYBINSKOYE RESERVOIR	58.5N	38.5E	55.7N	38.2E	15 N	L	O	100	N	N	84	280	8:46:8	197	105	28	15
31	28	USSR	VOLGA RIVER/ROSTOV/LAKES	57.0N	39.0E	55.5N	39.3E	15 N	L	O	100	N	N	84	280	8:46:19	197	106	29	15
31	29	USSR	KUYBYSHEV RES/VOLGA R	56.0N	49.0E	54.3N	44.9E	60 NE	L	O	100	N	N	84	280	8:47:13	197	111	30	15
31	30	USSR	KUYBYSHEV RES/VOLGA R	55.5N	49.0E	54.0N	46.3E	60 NE	L	O	100	N	N	84	280	8:47:27	197	112	30	15
31	31	USSR	KUYBYSHEV RES/VOLGA R	55.0N	49.0E	53.1N	49.5E	70 N	L	O	100	N	N	84	280	8:48:0	197	115	31	15
31	32	USSR	ARAL SEA	44.0N	58.5E	49.1N	60.2E	70 SE	L	O	100	N	N	84	280	8:50:4	197	123	34	15
31	33	USSR	KARATAU MTS/SYRDARYA R	44.0N	68.0E	44.5N	68.5E	30 NV	100	N	N	Y	84	280	8:52:0	196	130	35	15	
31	34	USSR	KARATAU MTS/SYRDARYA R	44.0N	68.0E	44.2N	69.0E	30 NV	100	N	N	Y	84	280	8:52:7	196	130	35	15	
31	35	USSR	LK KARAKUL/ZAALAYSKI MTS	39.0N	74.0E	39.7N	75.0E	30 NV	100	N	N	Y	84	280	8:53:48	195	135	36	15	
31	36	USSR	LK KARAKUL/ZAALAYSKI MTS	39.0N	74.0E	39.2N	75.5E	30 NV	100	N	N	Y	84	280	8:53:57	195	135	36	15	
31	37	CHINA	TARIM BASIN/YARKANT R	39.5N	78.5E	38.4N	76.5E	3 NV	100	N	N	Y	84	280	8:54:15	195	136	36	15	
31	38	CHINA	TARIM BASIN/YARKANT R	38.5N	77.5E	38.2N	76.8E	2 NV	100	N	N	Y	84	280	8:54:20	195	136	36	15	
31	39	CHINA	TARIM BASIN/YARKANT R	38.0N	77.0E	37.9N	77.0E	15 NV	100	N	N	Y	84	280	8:54:25	195	136	36	15	
31	40	CHINA	TARIM BASIN/YARKANT R	36.0N	77.0E	37.2N	77.8E	30 NV	100	N	N	Y	84	280	8:54:40	195	136	36	15	
31	41	CHINA	KARAKORAM RANGE	35.5N	77.0E	36.7N	78.4E	30 NV	100	N	N	Y	84	280	8:54:51	195	137	36	15	
31	42	CHINA	KUN-LUN MOUNTAINS/LAKES	35.0N	80.5E	35.0N	80.1E	5 NV	100	N	N	Y	84	280	8:55:25	195	138	36	15	
31	43	CHINA	KUN-LUN MOUNTAINS/LAKES	35.0N	81.0E	34.5N	80.6E	3 NV	100	N	N	Y	84	280	8:55:36	195	138	36	15	
31	44	CHINA	KUN-LUN MOUNTAINS/LAKES	34.5N	82.0E	33.9N	81.2E	1 NV	100	N	N	Y	84	280	8:55:48	194	139	36	15	
31	45	CHINA	KUN-LUN MOUNTAINS/LAKES	34.0N	82.5E	33.2N	81.8E	1 NV	100	N	N	Y	84	280	8:56:1	194	139	36	15	
31	46	CHINA	GANGDISE RANGE/PANGONG L	33.5N	79.5E	31.9N	83.0E	1 NW	100	N	N	Y	84	280	8:56:27	194	140	36	15	
31	47	NEPAL	GREAT HIMALAYA RANGE	29.0N	84.0E	31.1N	83.8E	0 NV	100	N	N	Y	84	280	8:56:44	194	140	36	15	
31	48	CHINA	GREAT HIMALAYA RANGE	29.0N	85.5E	29.4N	85.2E	5 NV	100	N	N	Y	84	280	8:57:16	194	141	36	15	
31	49	CHINA	GREAT HIMALAYA RANGE	28.5N	86.0E	28.8N	85.7E	5 NV	100	N	N	Y	84	280	8:57:28	194	141	36	15	
31	50	NEPAL	GREAT HIMALAYA RANGE	27.5N	86.5E	28.0N	86.3E	1 NV	100	N	N	Y	84	280	8:57:43	194	141	36	15	
31	51	NEPAL	GREAT HIMALAYA RANGE	27.0N	87.0E	27.4N	86.8E	1 NV	100	N	N	Y	84	280	8:57:55	194	142	36	15	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	NADIR LAT	NADIR LON	CCX	DR	TL	FL	E	S	DATE	BMT	ALT	NADIR AZI	ELE	ORB	
31	52	CHINA	HIMALAYAS/TIBET PLATEAU	31.5N	80.5E	25.8N	88.0E	5	NW	HO	100	N	N	84	280	81:58:28	193	142	35
31	53	INDIA	BAY OF BENGAL/OCN STRUCT	21.0N	89.0E	23.0N	90.1E	80	SW	LO	100	N	N	84	280	81:59:20	193	143	35
31	54	INDIA	BAY OF BENGAL/OCN STRUCT	21.0N	87.5E	21.9N	90.9E	50	W	LO	100	N	N	84	280	81:59:40	193	144	35
31	55	INDIA	BAY OF BENGAL/OCN STRUCT	20.0N	87.5E	20.2N	92.1E	30	NW	LO	100	N	N	84	280	81:01:12	193	144	34
31	56	BANGLADESH	BAY OF BENGAL/SEDIMENT	21.5N	89.0E	18.2N	93.4E	85	NW	LO	100	N	N	84	280	81:01:48	193	145	34
31	57	AUSTRALIA-WA	EXMOUTH GULF/BARROW I	21.5N	114.5E	21.8S	117.9E	15	W	LO	100	N	N	84	280	81:13:1	193	145	34
31	58	AUSTRALIA-WA	LAKE NABBERU/LAKE TEAGUE	25.5S	121.0E	26.8S	121.2E	0	N	LO	100	N	N	84	280	91:13:1	193	144	12
31	59	AUSTRALIA-WA	VERY DARK/BRT AUBT BIGHT	53.5N	8.0W	56.8N	10.7W	0	SW	LO	100	N	N	84	280	91:17:21	195	138	2
31	60	IRELAND	DUNDALK BAY/INTERNAL WV8	54.0N	8.0W	57.0N	8.6W	40	SW	LO	100	N	N	84	280	10:13:55	187	83	22
31	61	IRELAND	DUNDALK BAY/INTERNAL WV8	54.0N	8.0W	57.0N	8.6W	40	SW	LO	100	N	N	84	280	10:14:13	187	85	22
31	62	ENGLAND	THE WASH	51.5N	1.0E	57.0N	1.1E	60	S	LO	100	N	N	84	280	10:15:38	197	93	25
31	63	USSR	KERCHENSKIY ST/BLACK SEA	44.5N	37.5E	47.7N	39.7E	40	SW	LO	100	N	N	84	280	10:22:13	198	128	34
31	64	TURKEY	BLACK SEA/OIL SLICKS	42.0N	38.0E	45.7N	43.2E	40	SW	LO	100	N	N	84	280	10:23:1	198	128	35
31	65	TURKEY	BLACK SEA TO MEDITER SEA	41.0N	40.0E	43.7N	46.4E	40	SW	LO	100	N	N	84	280	10:23:51	198	131	38
31	66	TURKEY	BLACK SEA TO MEDITER SEA	38.0N	40.0E	43.3N	47.0E	30	SW	LO	100	N	N	84	280	10:24:1	198	131	38
31	67	TURKEY	GUNEE DOGU TOROSULAR	37.0N	37.0E	42.0N	48.8E	60	SW	LO	100	N	N	84	280	10:24:30	198	132	36
31	68	IRAN	KOPPEH MOUNTAINS	36.0N	58.0E	34.3N	57.8E	5	N	LO	100	N	N	84	280	10:27:13	194	138	37
31	69	IRAN	LAHGAR GAH MOUNTAIN	34.0N	58.5E	33.5N	58.3E	5	NV	100	N	N	84	280	10:27:29	194	139	37	
31	70	IRAN	LAHGAR GAH MOUNTAIN	33.5N	58.0E	32.7N	58.0E	5	NV	100	N	N	84	280	10:27:44	194	138	37	
31	71	IRAN	BONEDAR MOUNTAIN	32.0N	58.5E	31.8N	58.8E	3	NV	100	N	N	84	280	10:28:1	194	140	38	
31	72	IRAN	BONEDAR MOUNTAIN	32.0N	60.0E	31.2N	60.4E	2	NV	100	N	N	84	280	10:28:14	194	140	38	
31	73	IRAN	LK SABERI/DARYCHEH LK	31.5N	81.0E	30.5N	81.0E	1	NV	100	N	N	84	280	10:28:28	194	140	38	
31	74	IRAN	LK SABERI/DARYCHEH LK	30.5N	81.0E	29.8N	81.8E	0	NV	100	N	N	84	280	10:28:41	194	141	38	
31	75	IRAN	MAKRAN RANGE/ARABIAN SEA	28.5N	61.5E	28.5N	62.7E	0	SW	LO	100	N	N	84	280	10:28:1	194	141	38
31	76	IRAN	GULF OF OMAN/ARABIAN SEA	24.5N	60.5E	26.4N	64.3E	0	SW	LO	100	N	N	84	280	10:28:47	193	142	38
31	77	IRAN	INTERNAL WV8/FRONTAL DIS	24.5N	61.5E	26.0N	64.8E	0	SW	LO	100	N	N	84	280	10:29:55	193	142	38
31	78	OMAN	INTERNAL WV8/FRONTAL DIS	24.0N	62.0E	26.3N	65.1E	0	SW	LO	100	N	N	84	280	10:30:1	193	142	38
31	79	OMAN	GULF OF OMAN/ARABIAN SEA	23.0N	62.0E	24.6N	65.7E	0	SW	LO	100	N	N	84	280	10:30:22	193	143	35
31	80	OMAN	GULF OF OMAN/ARABIAN SEA	23.0N	62.0E	24.1N	66.0E	0	SW	LO	100	N	N	84	280	10:30:31	193	143	35
31	81	OMAN	GULF OF OMAN/ARABIAN SEA	23.0N	62.0E	23.6N	66.5E	0	W	LO	100	N	N	84	280	10:30:42	193	143	35
31	82	OMAN	GULF OF OMAN/ARABIAN SEA	23.0N	62.0E	23.1N	66.8E	0	W	LO	100	N	N	84	280	10:30:50	193	143	35
31	83	INDIA	ARABIAN SEA/GULF OF KUTCH	22.5N	69.0E	19.8N	69.2E	10	N	LO	100	N	N	84	280	10:31:58	193	144	34
31	84	INDIA	RANN OF KUTCH/KUTCH PEN	23.0N	69.5E	19.5N	69.3E	15	N	LO	100	N	N	84	280	10:31:58	193	144	34
31	85	INDIA	GULF OF KHAMPHAT	21.0N	72.5E	18.5N	70.0E	60	NW	LO	100	N	N	84	280	10:32:17	193	144	34
31	86	INDIA	COASTLINE/ARABIAN SEA	22.5N	68.5E	17.0N	70.9E	20	NW	LO	100	N	N	84	280	10:32:45	192	145	33
31	87	INDIA	ARABIAN SEA/SHIP WAKES	20.0N	68.0E	18.4N	71.3E	40	NW	LO	100	N	N	84	280	10:32:56	192	145	33
31	88		VERY DARK			45.1N	73.7W			100	U								
31	89		VERY DARK			45.6N	73.0W			100	U								
31	90		VERY DARK			48.2N	71.5W			100	U								
31	91		VERY DARK			48.7N	71.1W			100	U								
31	92		VERY DARK			48.9N	70.7W			100	U								
31	93		VERY DARK			47.5N	69.5W			100	U								
31	94		VERY DARK			47.9N	68.7W			100	U								
31	95		VERY DARK			48.5N	67.6W			100	U								
31	96	ATLANTIC OCEAN	OCCLUDED CYCLONE	54.7N	49.1W	54.7N	49.1W	80	NV	100	N	N	84	280	11:43:1	185	55	8	
31	97	ATLANTIC OCEAN	OCCLUDED CYCLONE	54.8N	48.5W	54.8N	48.5W	80	NV	100	N	N	84	280	11:43:1	185	55	8	
31	98	ATLANTIC OCEAN	OCCLUDED CYCLONE	55.2N	48.0W	55.2N	48.0W	85	NV	100	N	N	84	280	11:43:15	187	70	16	
31	99	ATLANTIC OCEAN	OCCLUDED CYCLONE	55.4N	48.0W	55.4N	48.0W	85	NV	100	N	N	84	280	11:43:31	187	72	17	
31	100	ICELAND	CLOUDS/GREENLAND	65.0N	21.0W	65.0N	21.0W	80	NE	HO	100	N	N	84	280	11:43:38	187	72	18
31	101	ICELAND	CLOUDS/GREENLAND	65.0N	17.0W	65.0N	17.0W	80	NE	HO	100	N	N	84	280	11:48:48	187	81	24
31	102	ICELAND	CLOUDS/GREENLAND	65.0N	17.0W	65.0N	17.0W	80	NE	HO	100	N	N	84	280	11:48:59	187	82	24

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB
31	102	SCOTLAND	MULL OF KINTYRE/CLOUDS	55.5N 5.5W	55.2N 5.7W	85	NV 100 N Y 84 280	11:49:38 197	107	29 17
31	103	SCOTLAND	MULL OF KINTYRE/CLOUDS	55.5N 5.0W	55.0N 4.9W	85	NV 100 N Y 84 280	11:49:48 197	108	29 17
31	104	SCOTLAND	MULL OF KINTYRE/CLOUDS	55.5N 5.5W	54.9N 4.3W	85	NV 100 N Y 84 280	11:49:52 197	109	29 17
31	105	NORTHERN IRELAND	CLOUDS	55.0N 6.0W	54.6N 2.6W	80 W	LO 100 N N 84 280	11:50:00 197	110	30 17
31	106	ENGLAND	THE WASH	53.0N 0.5E	53.8N 0.5E	75	NV 100 N N 84 280	11:50:00 197	111	31 17
31	107	ENGLAND	STRAIT OF DOVER	52.0N 2.0E	53.4N 2.0E	80 S	LO 100 N N 84 280	11:50:00 197	112	31 17
31	108	NETHERLANDS	CLOUDS	52.4N 5.2E	52.4N 5.2E	80	NV 100 N Y 84 280	11:51:30 197	117	32 17
31	109	NETHERLANDS	CLOUDS	52.2N 5.7E	52.2N 5.7E	80	NV 100 N Y 84 280	11:51:30 197	117	32 17
31	110	YUGOSLAVIA	ADRIATIC SEA/DCN STRUCT	44.0N 14.5E	47.9N 16.0E	70 SW	LO 100 N N 84 280	11:53:41 196	125	34 17
31	111	YUGOSLAVIA	ADRIATIC SEA/DCN STRUCT	44.0N 15.0E	47.6N 16.7E	70 SW	LO 100 N N 84 280	11:53:50 196	128	34 17
31	112	YUGOSLAVIA	ADRIATIC SEA/DCN STRUCT	43.5N 15.5E	47.1N 17.6E	75 SW	LO 100 N N 84 280	11:54:00 196	127	35 17
31	113	YUGOSLAVIA	ADRIATIC SEA/DCN STRUCT	43.5N 16.5E	46.2N 19.1E	80 SW	LO 100 N N 84 280	11:54:24 196	128	35 17
32	2	IRAN	PERSIAN GULF/ZAGROS MTS	27.5N 53.0E	24.3N 54.5E	20 E	LO 100 N N 84 279	11:37:00 193	143	31 1
32	3	IRAN	STRAIT OF HORMUZ/ISLANDS	26.5N 56.0E	22.7N 55.6E	25 E	LO 100 N N 84 279	11:37:38 192	143	31 1
32	4		PAYLOAD BAY	52.6N 52.6N	52.6N 52.6N	100 U	U 84 279	12:58:21 197	116	31 2
32	5		PAYLOAD BAY	52.1N 5.2W	52.1N 5.2W	100 U	U 84 279	12:58:21 197	117	32 2
32	6		PAYLOAD BAY	50.3N 0.5W	50.3N 0.5W	100 N	LO 100 N Y 84 279	13:00:00 197	121	32 2
32	7	GREECE	PELOPONNISOS	37.0N 22.0E	34.8N 22.4E	3 N	LO 100 N Y 84 279	13:00:00 197	138	34 2
32	8	GREECE	SOUTHERN PELOPONNISOS	37.0N 22.0E	34.4N 22.7E	1 N	LO 100 N Y 84 279	13:00:00 197	138	34 2
32	9	EGYPT	NILE DELTA/LIBYAN DESERT	31.0N 30.5E	28.6N 28.0E	0 NE	LO 100 N N 84 279	13:00:00 197	141	33 2
32	10	EGYPT	NILE RIVER/RED SEA	23.5N 33.5E	25.9N 29.3E	30 SE	HO 100 N N 84 279	13:00:00 193	142	32 2
32	11	EGYPT	SINAI PENINSULA	30.0N 34.5E	26.1N 29.9E	5 N	HO 100 N N 84 279	13:00:00 193	142	32 2
32	12	ETHIOPIA	AFAR TRIANGLE	13.0N 41.0E	18.0N 36.6E	8 SE	HO 100 N N 84 279	13:10:39 192	145	30 2
32	13	ETHIOPIA	VOLCANOS/AFRERA LAKE	13.0N 41.0E	15.2N 37.4E	5 SE	LO 100 N N 84 279	13:11:32 192	145	28 2
32	14	ETHIOPIA	VOLCANOS/AFRERA LAKE	13.0N 40.5E	12.2N 39.2E	1 NE	LO 100 N N 84 279	13:12:27 192	146	27 2
32	15	ETHIOPIA	ABHE BID L/TADJOURA GULF	12.5N 41.0E	11.3N 39.8E	1 NE	LO 100 N N 84 279	13:12:43 191	146	27 2
32	16	DJIBOUTI	ABHE BID L/TADJOURA GULF	11.5N 42.0E	9.9N 40.6E	3 NE	LO 100 N N 84 279	13:13:00 191	146	26 2
32	17	CANADA-NWT	BELCHER ISLANDS	56.5N 79.5W	55.7N 78.9W	50	NV 100 N Y 84 279	14:22:10 197	74	20 3
32	18	CANADA-NWT	BELCHER ISLANDS	56.5N 79.5W	55.8N 78.4W	50	NV 100 N Y 84 279	14:22:15 197	74	21 3
32	19	CANADA-NWT	BELCHER ISLANDS	56.5N 79.5W	55.8N 77.8W	50	NV 100 N Y 84 279	14:22:20 197	75	21 3
32	20	CANADA-Q	CLEARWATER LAKE	56.0N 74.5W	56.3N 74.7W	50	NV 100 N N 84 279	14:22:48 197	78	22 3
32	21	CANADA-Q	CLEARWATER LAKE	56.0N 74.5W	56.7N 70.5W	50 W	LO 100 N N 84 279	14:23:26 197	81	23 3
32	22	SPAIN	STRAIT OF GIBRALTAR	36.0N 6.0W	37.6N 3.6W	50 SW	LO 100 N N 84 279	14:35:53 195	136	34 3
32	23		VERY DARK	53.4N 8.3W	53.4N 8.3W	100 U	U 84 280	8:39:00 196	65	15 15
32	24		VERY DARK	53.7N 7.2W	53.7N 7.2W	100 U	U 84 280	8:39:00 196	66	15 15
32	25		VERY DARK	54.1N 5.3W	54.1N 5.3W	100 U	U 84 280	8:39:38 197	68	16 15
32	26		VERY DARK	54.8N 2.4W	54.8N 2.4W	100 U	U 84 280	8:40:00 197	70	17 15
32	27		VERY DARK	54.8N 2.4W	54.8N 2.4W	100 U	U 84 280	8:40:00 197	70	17 15
33	2	ITALY	BARI	41.0N 17.0E	41.0N 17.4E	0	NV 250 F N 84 283	11:26:11 125	133	41 65
33	3	ITALY	TARANTO	40.5N 18.0E	40.6N 17.8E	5 W	LO 250 N N 84 283	11:26:20 125	134	41 65
33	4	ITALY	SAN PANCRASIO SALENTINO	40.5N 18.0E	40.2N 18.4E	5	NV 250 N N 84 283	11:26:28 125	134	41 65
33	5	GREECE	KEFALLINIA/ITHAKI IS	38.0N 20.5E	38.2N 20.7E	0	NV 250 N Y 84 283	11:27:00 125	138	43 65
33	6	GREECE	KEFALLINIA/ITHAKI IS	38.0N 20.5E	38.0N 20.9E	0	NV 250 N Y 84 283	11:27:13 125	138	43 65
33	7	GREECE	PELOPONNISOS/ARGOLIKOS B	37.5N 23.0E	36.6N 22.5E	0 NE	LO 250 F Y 84 283	11:27:42 125	137	44 65
33	8	GREECE	PELOPONNISOS/ARGOLIKOS B	37.5N 23.0E	36.4N 22.7E	0 NE	LO 250 N Y 84 283	11:27:46 125	137	44 65
33	9	GREECE	PELOPONNISOS/ARGOLIKOS B	37.5N 23.0E	35.9N 23.2E	0	NV 250 N N 84 283	11:27:56 124	137	44 65
33	10	MEDITERRANEAN SEA	KITHIRO ISLAND	36.0N 23.0E	35.9N 23.2E	0	NV 250 N N 84 283	11:28:17 124	138	44 65
33	11	LIBYA	EDDIES NEAR GREECE	35.0N 24.5E	34.8N 24.3E	0	LO 250 N N 84 283	11:28:33 124	138	45 65
33	12	LIBYA	MEDITERRANEAN SEA EDDIES	33.0N 23.0E	34.0N 25.1E	0 SW	LO 250 N N 84 283	11:28:33 124	138	45 65
33	13	LIBYA	MEDITERRANEAN SEA EDDIES	32.5N 23.5E	33.7N 25.3E	0 SW	LO 250 N N 84 283	11:28:39 124	139	45 65
33	14	EGYPT	MEDITERRANEAN SEA EDDIES	32.5N 23.5E	33.0N 25.0E	0 SW	LO 250 N N 84 283	11:28:53 124	139	45 65
33	15	EGYPT	ASWAN/LAKE NASSER	24.0N 33.0E	23.4N 33.8E	0 NW	LO 250 N Y 84 283	11:31:53 123	143	48 65

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB
33	15	EGYPT	ASWAN/LAKE NASSER	24.0N 33.0E	23.2N 34.0E	0 NW	LO 250 N Y 84 283	11:31:58	122	143 48 65
33	16	ATLANTIC OCEAN	SHIPWRECK/ON STRUCTURE	43.5N 8.8W	43.5N 8.6W	0	LO 250 F N 84 283	12:54:13	126	131 39 68
33	17	PORTUGAL	LISBON/N ATLANTIC GYRE	38.5N 8.0W	41.8N 6.3W	0 SW	LO 250 F N 84 283	12:54:13	126	131 39 68
33	18	MOROCCO	ATLANTIC INTERNAL WVS	35.0N 7.0W	40.2N 4.1W	10 SW	LO 250 F N 84 283	12:55:25	125	134 42 66
33	19	SPAIN	GULF OF CADIZ INTERN WVS	35.0N 7.0W	38.7N 3.5W	10 SW	LO 250 F N 84 283	12:55:38	125	135 42 66
33	20	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.5W	38.6N 2.3W	10 SW	LO 250 F N 84 283	12:55:57	125	135 42 66
33	21	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.5W	37.7N 1.3W	10 SW	LO 250 F N 84 283	12:56:18	125	138 43 68
33	22	ZAMBIA	LAKE BANGWEULU	11.6S 30.0E	11.0S 32.1E	30 W	LO 250 F N 84 283	13:11:2	121	148 37 66
33	23	CANADA-BC	CANADIAN ROCKY MOUNTAINS	57.1N 128.8W	57.1N 128.6W	20	LO 250 F N 84 283	17:12:22	128	88 18 69
33	24	CANADA-BC	CANADIAN ROCKY MOUNTAINS	57.0N 122.8W	57.0N 122.8W	0	NV 250 N Y 84 283	17:12:54	128	93 18 69
33	25	CANADA-BC	CANADIAN ROCKY MOUNTAINS	57.0N 122.3W	57.0N 122.3W	2	NV 250 N Y 84 283	17:12:58	128	93 18 69
33	26	CANADA-BC	CANADIAN ROCKY MOUNTAINS	57.0N 121.9W	57.0N 121.9W	10	NV 250 N Y 84 283	17:13:1	128	93 18 69
33	27	CANADA-BC	CANADIAN ROCKY MOUNTAINS	57.0N 121.5W	57.0N 121.5W	1	NV 250 N Y 84 283	17:13:44	128	98 20 69
33	28	CANADA-A	GRANDE PRAIRIE/SHOKY R	55.0N 118.5W	58.7N 116.5W	10 SW	LO 250 F N 84 283	17:13:47	128	98 20 69
33	29	CANADA-A	GRANDE PRAIRIE/SHOKY R	55.0N 118.5W	58.7N 116.5W	10 SW	LO 250 F N 84 283	17:13:47	128	98 20 69
33	30	CANADA-A	LESSER SLAVE LAKE	55.5N 118.0W	58.6N 115.4W	0 SW	LO 250 F N 84 283	17:13:57	128	98 21 69
33	31	CANADA-A	LESSER SLAVE LAKE	55.5N 118.0W	58.6N 115.4W	0 SW	LO 250 F N 84 283	17:13:57	128	98 21 69
33	32	CANADA-A	EDMONTON/BEAVERHILL LAKE	54.0N 113.0W	56.3N 112.8W	0 SW	LO 250 F N 84 283	17:14:18	128	101 22 69
33	33	CANADA-A	BEAVERHILL LAKE	53.5N 112.5W	56.2N 112.1W	0 SW	LO 250 N N 84 283	17:14:25	128	102 22 69
33	34	CANADA-A	MOOSE LAKE/MURIEL LAKE	54.0N 111.0W	56.1N 110.8W	0 S	LO 250 N N 84 283	17:14:38	128	103 23 69
33	35	CANADA-S	SQUAW RAPIDS DAM	55.0N 103.5W	55.0N 104.5W	0 SE	LO 250 U N 84 283	17:15:34	128	108 25 69
33	36	CANADA-S	DEEP BAY IMPACT CRATER	56.5N 103.0W	54.5N 102.2W	0 NW	LO 250 N N 84 283	17:15:58	128	110 26 69
33	37	CANADA-M	STONHOUSE LAKE	54.5N 101.0W	54.0N 100.1W	0 NW	LO 250 N N 84 283	17:16:18	128	112 27 69
33	38	CANADA-M	CANADIAN SHIELD LAKES	52.3N 84.4W	52.3N 84.4W	0	LO 250 F N 84 283	17:17:15	127	117 30 69
33	39	CANADA-M	RIVER DRAINAGE PATTERNS	52.3N 84.0W	52.2N 84.0W	1	NV 250 N N 84 283	17:17:19	127	117 30 69
33	40	USA-MASSACHUSETTS	NANTUCKET ISLAND	41.5N 70.0W	40.1N 71.9W	50 NW	LO 250 N N 84 283	17:22:17	125	134 42 68
33	41	USA-MASSACHUSETTS	MARTHAS VINEYARD	41.5N 70.5W	39.8N 71.5W	70 NW	LO 250 N N 84 283	17:22:23	125	134 42 68
33	42	USA-ALASKA	ANAKCHAK CRATER	57.0N 158.0W	56.7N 158.5W	30	NV 250 F Y 84 283	18:38:56	128	81 12 70
33	43	USA-ALASKA	ANAKCHAK CRATER	57.0N 158.0W	56.7N 158.5W	30	NV 250 U Y 84 283	18:40:1	128	81 12 70
33	44	USA-ALASKA	ANAKCHAK CRATER	57.0N 158.0W	56.7N 158.5W	20	NV 250 U Y 84 283	18:40:1	128	82 12 70
33	45	USA-ALASKA	ALEUTIAN RANGE	57.0N 157.5W	56.8N 157.7W	10	NV 250 U Y 84 283	18:40:1	128	82 12 70
33	46	USA-ALASKA	MOUNT CHIGTNAK	57.0N 157.0W	56.8N 156.7W	0	NV 250 U N 84 283	18:40:18	128	83 13 70
33	47	USA-ALASKA	MOUNT PEULIK/UGASHIK LK	57.0N 156.5W	56.8N 156.1W	0	NV 250 U N 84 283	18:40:28	128	84 13 70
33	48	USA-ALASKA	MOUNT MEGUITK	57.0N 155.0W	57.0N 153.9W	10 W	LO 250 U Y 84 283	18:40:39	128	85 14 70
33	49	USA-ALASKA	MOUNT MEGUITK	57.0N 155.0W	57.0N 153.9W	20 W	LO 250 U Y 84 283	18:40:43	128	86 14 70
33	50	CANADA-A	SHOKY RIVER	54.0N 119.5W	53.1N 119.6W	30 N	LO 250 U Y 84 283	18:45:44	128	115 29 70
33	51	CANADA-A	SHOKY RIVER	54.0N 119.5W	52.8N 118.2W	10 N	LO 250 U Y 84 283	18:45:48	128	115 29 70
33	52	CANADA-A	SHOKY RIVER	54.0N 119.5W	52.8N 118.0W	10 N	LO 250 U Y 84 283	18:45:51	128	115 29 70
33	53	USA-MISSOURI	ST. LOUIS	38.0N 80.0W	37.1N 81.0W	80 NE	LO 250 N N 84 283	18:52:18	125	137 44 70
33	54	USA-FLORIDA	PENSACOLA BAY	30.5N 87.0W	31.9N 86.6W	80 SW	LO 250 N N 84 283	18:53:59	124	140 46 70
33	55	USA-FLORIDA	CAPE SAN BLAS	30.0N 85.0W	31.0N 85.1W	40 S	LO 250 N N 84 283	18:54:18	124	140 47 70
33	56	USA-FLORIDA	KENNEDY SPACE CENTER	28.5N 80.5W	28.8N 80.4W	60 SE	LO 250 F N 84 283	18:54:39	124	141 47 70
33	57	USA-FLORIDA	KENNEDY SPACE CENTER	28.5N 80.5W	27.7N 82.3W	80 NE	LO 250 F N 84 283	18:55:18	123	142 48 70
33	58	USA-FLORIDA	COASTLINE	28.5N 80.0W	28.8N 81.8W	80 E	LO 250 F N 84 283	18:55:35	123	142 48 70
33	59	USA-FLORIDA	COASTLINE	28.5N 80.0W	28.7N 81.5W	80 E	LO 250 F N 84 283	18:55:37	123	142 48 70
33	60	USA-FLORIDA	MIAMI	25.5N 80.0W	25.6N 80.4W	40	NV 250 F N 84 283	18:56:1	123	142 48 70
33	61	USA-FLORIDA	MIAMI	25.5N 80.0W	25.3N 80.4W	40	NV 250 F N 84 283	18:56:1	123	143 48 70
33	62	USA-FLORIDA	FLORIDA BAY	25.0N 80.5W	24.8N 80.0W	30	NV 250 F N 84 283	18:56:13	123	143 48 70
33	63	CUBA	GUANTANAMO BAY	20.0N 75.0W	18.8N 76.9W	20 N	LO 250 F N 84 283	18:58:1	2	122 144 49 70
33	64	VENEZUELA	COASTLINE/SUNGINT	10.4N 70.6W	10.4N 70.6W	0 SW	LO 250 F N 84 283	18:58:18	0:31	121 146 48 70

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GHT	ALT	NADIR AZI ELE ORB
33	65	USA-OREGON	CASCADE RANGE/MOUNT HOOD	45.5N 122.0W	45.7N 125.0W	80 E	L0 250 F N 84 283	20:18:7	126	128 37 71
33	66	USA-OREGON	CASCADE RA/MT JEFFERSON	44.5N 122.0W	45.5N 124.7W	80 SE	L0 250 F N 84 283	20:18:11	126	129 37 71
33	67	USA-OREGON	CASCADE RA/THREE SISTERS	44.0N 122.0W	45.2N 124.2W	70 SE	L0 250 F N 84 283	20:19:18	126	129 38 71
33	68	USA-CALIFORNIA	OWENS VALLEY/MONO LAKE	36.5N 118.0W	42.5N 120.2W	30 SE	L0 250 F N 84 283	20:19:18	126	132 40 71
33	69	USA-ARIZONA	LAKE MEAD/COLORADO RIVER	36.0N 114.0W	37.2N 113.6W	0 SW	L0 250 F N 84 283	20:21:12	125	136 44 71
33	70	USA-ARIZONA	COLORADO RIVER	36.0N 113.5W	36.8N 113.2W	2 S	L0 250 F N 84 283	20:21:20	125	137 44 71
33	71	USA-ARIZONA	COLORADO RIVER	36.0N 113.5W	36.5N 112.9W	2 SW	L0 250 F N 84 283	20:21:26	125	137 44 71
33	72	MEXICO	RIO DE CASAS GRANDES	31.5N 108.0W	31.7N 108.3W	30	NV 250 F N 84 283	20:22:59	124	140 47 71
33	73	MEXICO	AGUAS TERMALES	31.0N 107.0W	30.8N 107.5W	30	NV 250 F N 84 283	20:23:17	124	140 47 71
33	74	CHILE	ANDES MOUNTAINS	31.5S 70.0W	28.4S 68.8W	0 SW	L0 250 N Y 84 283	20:41:3	123	141 25 71
33	75	ARGENTINA	ANDES MOUNTAINS	31.5S 70.0W	28.7S 68.6W	0 SW	L0 250 N Y 84 283	20:41:8	123	141 25 71
33	76	ARGENTINA	ANDES MOUNTAINS	31.5S 70.0W	28.9S 68.4W	0 SW	L0 250 N Y 84 283	20:41:13	123	141 24 71
33	77	ARGENTINA	ANDES MOUNTAINS	31.0S 70.0W	29.7S 67.8W	0 SW	L0 250 N Y 84 283	20:41:27	123	141 24 71
33	78	ARGENTINA	ANDES MOUNTAINS	32.5S 70.0W	30.1S 67.4W	0 SW	L0 250 N Y 84 283	20:41:34	123	141 23 71
33	79	ISLA DE PASCUA	EASTER ISLAND	27.0S 109.5W	28.8S 113.7W	50 NE	L0 250 F N 84 283	23:38:4	123	141 25 73
33	80	ISLA DE PASCUA	EASTER ISLAND	27.0S 109.5W	29.2S 113.4W	50 NE	L0 250 F N 84 283	23:38:11	123	141 25 73
33	81	INDIA	BANGANGA RIVER	27.0N 76.0E	26.7N 75.0E	0 NE	L0 250 N Y 84 284	8:16:9	123	142 50 79
33	82	INDIA	JAIPUR/BANGANGA RIVER	27.0N 76.0E	26.5N 75.2E	0 NE	L0 250 N Y 84 284	8:16:14	123	142 50 79
33	83	INDIA	BANGANGA RIVER	27.0N 76.0E	26.3N 75.3E	0 NE	L0 250 N Y 84 284	8:16:17	123	142 50 79
33	84	INDIA	DHUND RIVER	26.5N 76.5E	26.0N 75.6E	0 NE	L0 250 N Y 84 284	8:16:22	123	142 50 79
33	85	AUSTRALIA	PERTH/FIRES	32.0S 116.0E	33.5S 114.8E	0 NE	L0 250 U Y 84 284	8:34:16	124	139 23 78
33	86	AUSTRALIA	PERTH/FIRES	31.5S 116.0E	33.8S 115.1E	0 NE	L0 250 U Y 84 284	8:34:22	124	139 22 79
33	87	AUSTRALIA	COASTLINE/VERY DARK	35.0S 117.0E	35.4S 116.7E	10	NV 250 U N 84 284	8:34:54	124	138 21 79
33	88	AUSTRALIA	COASTLINE/VERY DARK	34.5S 118.5E	36.0S 117.3E	20 NE	L0 250 U N 84 284	8:35:5	124	137 20 79
33	89	IRAN	KHARK & KHARKU ISLANDS	29.0N 50.5E	29.7N 50.0E	10 SE	L0 250 U Y 84 284	9:44:10	124	141 49 80
33	90	IRAN	KHARK & KHARKU ISLANDS	29.0N 50.5E	29.0N 50.6E	10 NW	L0 250 U Y 84 284	9:44:23	124	141 49 80
33	91	SWITZERLAND	BRIENZER & THUNER LAKES	47.0N 7.5E	47.1N 6.5E	30 E	L0 250 F Y 84 284	11:7:3	126	127 36 81
33	92	SWITZERLAND	BRIENZER & THUNER LAKES	48.5N 8.0E	48.9N 6.8E	10 E	L0 250 F Y 84 284	11:7:7	126	127 36 81
33	93	SWITZERLAND	BRIENZER & THUNER LAKES	46.5N 9.0E	46.8N 7.1E	20 E	L0 250 F Y 84 284	11:7:10	126	127 36 81
33	94	SWITZERLAND	THE ALPS	46.5N 9.0E	46.2N 8.1E	0 E	L0 250 F Y 84 284	11:7:24	126	128 37 81
33	95	SWITZERLAND	THE ALPS	46.5N 9.0E	46.0N 8.4E	0 E	L0 250 F Y 84 284	11:7:29	126	128 37 81
33	96	SWITZERLAND	THE ALPS	46.5N 9.0E	45.8N 8.8E	0 NE	L0 250 F Y 84 284	11:7:34	126	128 37 81
33	97	SWITZERLAND	THE ALPS	46.0N 9.5E	45.6N 9.1E	0 NE	L0 250 F Y 84 284	11:7:38	126	129 37 81
33	98	SWITZERLAND	THE ALPS	46.0N 10.0E	45.5N 9.4E	0 NE	L0 250 F Y 84 284	11:7:42	126	129 37 81
33	99	ITALY	THE ALPS/LAGO DI GARDA	46.0N 11.0E	45.0N 10.1E	0 NE	L0 250 F Y 84 284	11:7:52	126	129 38 81
33	100	ITALY	THE ALPS/LAGO DI GARDA	48.0N 11.0E	44.9N 10.2E	0 NE	L0 250 F Y 84 284	11:7:54	126	129 38 81
33	101	ITALY	LAGO DI BOLSENA	42.0N 12.0E	42.4N 14.0E	10 SW	L0 250 F N 84 284	11:8:52	126	132 40 81
33	102	ITALY	GULFO DI SALERNO	40.5N 14.5E	41.7N 14.9E	40 S	L0 250 F N 84 284	11:9:7	125	133 41 81
33	103	ITALY	GULFO DI SALERNO	40.5N 15.0E	41.4N 15.2E	30 S	L0 250 F N 84 284	11:9:12	125	133 41 81
33	104	ITALY	GULFO DI SALERNO	40.5N 15.0E	41.2N 15.6E	30 S	L0 250 F N 84 284	11:9:17	125	133 41 81
33	105	SPAIN	AGRICULTURE	39.0N 5.2W	39.8N 5.2W	0	L0 250 F N 84 284	12:38:41	123	134 42 82
33	106	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.0W	39.2N 4.5W	10 SW	L0 250 F N 84 284	12:38:53	123	135 43 82
33	107	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.5W	38.9N 4.1W	10 SW	L0 250 F N 84 284	12:38:59	123	135 43 82
33	108	CANARY ISLANDS	HIERRO IS/ATLANTIC STRUC	27.5N 18.0W	29.0N 17.0W	10 SW	L0 250 F N 84 284	14:11:8	121	141 49 83
33	109	WESTERN SAHARA	ATLANTIC OCEAN/SHIPWAKES	24.5N 15.5W	25.4N 14.2W	15 SW	L0 250 F N 84 284	14:12:14	121	142 51 83
33	110	MAURITANIA	RICHAT RING DIKE	21.0N 11.5W	22.0N 11.7W	0 S	L0 250 F N 84 284	14:13:17	120	144 52 83
33	111	CANADA-M	LAKE WINNIPEG	53.0N 100.0W	56.8N 96.7W	10 SW	L0 250 F N 84 284	15:27:40	125	97 17 84
33	112	CANADA-M	LAKE WINNIPEG	52.5N 99.0W	56.7N 95.6W	30 SW	L0 250 F N 84 284	15:27:50	125	98 18 84
33	113	CANADA-NWT	BELCHER ISLANDS	56.5N 80.0W	55.0N 83.7W	20 NW	L0 250 F N 84 284	15:29:35	125	108 23 84
34	2	TURKEY	SINOP/BLACK SEA EDDIES	42.0N 34.0E	44.0N 34.2E	10 S	L0 100 O N 84 284	9:39:18	126	130 39 80

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	NADIR LAT	NADIR LON	CC% DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB
34	3	TURKEY	SINOP/BLACK SEA EDDIES	42.0N	35.0E	43.8N	20 S	LO 100 N Y 84 284	9:38:24	126	131 38 80
34	4	TURKEY	SINOP/BLACK SEA EDDIES	42.0N	35.5E	43.5N	30 S	LO 100 N Y 84 284	9:38:30	128	131 38 80
34	5	TURKEY	SINOP/BLACK SEA EDDIES	42.0N	35.5E	43.5N	30 S	LO 100 N Y 84 284	9:38:30	128	131 38 80
34	6	TURKEY	SINOP/BLACK SEA EDDIES	42.0N	35.5E	43.5N	30 S	LO 100 N Y 84 284	9:38:30	128	131 38 80
34	7	TURKEY	NORTH ANATOLIAN FAULT	40.0N	38.0E	41.5N	40 S	LO 100 N N 84 284	9:40:13	126	133 41 80
34	8	TURKEY	NORTH ANATOLIAN FAULT	40.0N	38.0E	41.5N	40 S	LO 100 N N 84 284	9:40:13	126	133 41 80
34	9	TURKEY	KEBAN RESERVOIR	39.0N	39.0E	40.8N	0 SE	LO 100 N N 84 284	9:40:21	128	133 41 80
34	10	UNITED ARAB EMIRATES	ABU DHABI	39.0N	39.0E	40.8N	0 SE	LO 100 N N 84 284	9:40:21	128	133 41 80
34	11	OMAN	FAHID OIL FIELD	24.5N	54.5E	24.4N	0	NV 100 N N 84 284	9:40:28	128	134 42 80
34	12	CELTIC SEA	GHABA CENTRAL	22.5N	56.5E	22.4N	1 E	LO 100 N N 84 284	9:40:28	128	134 42 80
34	13	ENGLAND	CLOUDS AND WATER	21.5N	57.0E	21.4N	0 E	LO 100 N N 84 284	9:40:28	128	134 42 80
34	14	FRANCE	THE WASH/HUMBER	52.8N	7.0W	52.8N	7.0W	60 SW	LO 100 N N 84 284	11: 4:22	127 116 28 81
34	15	GERMANY	CLOUDS	53.0N	1.0W	49.0N	2.7E	70 NW	LO 100 N N 84 284	11: 8:13	127 124 33 81
34	16	ITALY	BODENSEE LAKE	47.8N	5.6E	47.8N	5.6E	85	LO 100 N N 84 284	11: 8:50	127 126 35 81
34	17	SWITZERLAND	CLOUDS	48.0N	8.5E	48.8N	7.1E	85 E	LO 100 N N 84 284	11: 7:10	126 127 36 81
34	18	AUSTRIA	BRIENZER & THUNER LAKES	45.9N	8.6E	45.8N	8.6E	85	LO 100 N N 84 284	11: 7:13	126 128 37 81
34	19	AUSTRIA	THE ALPS	47.0N	8.0E	45.5N	8.2E	85 NW	LO 100 N N 84 284	11: 7:14	126 128 37 81
34	20	AUSTRIA	AUSTRIA/YUGOSLAVIA/ITALY	47.5N	14.0E	44.6N	10.7E	70 NE	LO 100 N N 84 284	11: 8:1	126 130 38 81
34	21	HUNGARY	PIRINUS MTS/LAKE OHRID	48.5N	15.0E	42.7N	13.5E	70 NE	LO 100 N N 84 284	11: 8:14	126 132 40 81
34	22	MADAGASCAR	FIRES/SUNGLINT/CLOUDS	41.0N	20.5E	38.6N	18.7E	30 NE	LO 100 N N 84 284	11:10:12	125 135 43 81
34	23	PORTUGAL	SIERRA MONCHIQUE	13.0S	49.0E	13.0S	54.4E	50 W	LO 100 N N 84 284	11:26:51	121 148 41 81
34	24	SPAIN	MEDITERRANEAN EDDIES	38.0N	9.0W	38.5N	3.6W	30 E	LO 100 N N 84 284	12:39:1	123 136 43 82
34	25	SPAIN	MEDITERRANEAN EDDIES	38.5N	2.5W	38.1N	3.2W	5 S	LO 100 N N 84 284	12:39:15	123 138 44 82
34	26	SPAIN	MEDITERRANEAN EDDIES	38.5N	2.5W	37.7N	2.7W	5 S	LO 100 N N 84 284	12:39:20	123 136 44 82
34	27	INDIAN OCEAN	PENIBETICO MOUNTAINS	38.5N	3.5W	37.0N	2.0W	1 SW	LO 100 N N 84 284	12:39:12	122 138 44 82
34	28	WESTERN SAHARA	CLOUDS AND WATER	27.3S	41.7E	27.3S	41.7E	60	HO 100 N N 84 284	12:39:18	122 137 45 82
34	29	CANADA-N	SANDSTORM	21.5N	17.0W	26.4N	15.0W	20 SW	HO 100 N N 84 284	12:59:1	122 142 28 82
34	30	CANADA-NWT	HIGH ROCK & OTHER LAKES	55.0N	101.0W	57.0N	100.7W	0 S	LO 100 N N 84 284	14:11:55	121 142 50 83
34	31	CANADA-NWT	BELCHER ISLANDS/EDDY	58.5N	81.0W	55.1N	83.9W	20 SE	LO 100 N N 84 284	15:29:33	125 108 23 84
34	32	CANADA-NWT	BELCHER ISLANDS	58.0N	80.0W	54.8N	83.1W	30 NE	LO 100 N N 84 284	15:29:41	125 108 24 84
34	33	CANADA-NWT	BELCHER ISLANDS	58.0N	80.0W	54.8N	83.1W	30 NE	LO 100 N N 84 284	15:29:41	125 110 24 84
34	34	CANADA-NWT	BELCHER ISLANDS	58.0N	80.0W	54.8N	83.1W	30 NE	LO 100 N N 84 284	15:29:41	125 110 24 84
34	35	PACIFIC OCEAN	EARTH LIMB SUNRISE	37.0N	174.1E	37.0N	174.1E	0 SE	HO 100 N N 84 284	15:30:17	125 111 25 84
34	36	PACIFIC OCEAN	EARTH LIMB SUNRISE	37.0N	174.1E	37.0N	174.1E	0 SE	HO 100 N N 84 284	15:30:17	125 112 26 84
34	37	CANADA-O	GREAT LAKES CLOUDS/GLINT	38.3N	175.5E	38.3N	175.5E	0 SE	HO 100 N N 84 284	16:44:26	123 43 -18 85
34	38	USA-NORTH CAROLINA	COASTLINE/CLOUDS	38.0N	78.0W	40.2N	73.5W	80 SW	HO 100 N N 84 284	17: 2:21	124 128 35 85
34	39	ATLANTIC OCEAN	HURRICANE JOSEPHINE	38.0N	78.0W	40.2N	73.5W	80 SW	HO 100 N N 84 284	17: 2:21	124 128 35 85
34	40	ATLANTIC OCEAN	HURRICANE JOSEPHINE	38.0N	78.0W	40.2N	73.5W	80 SW	HO 100 N N 84 284	17: 2:21	124 128 35 85
34	41	USA-NEBRASKA	HURRICANE JOSEPHINE	32.8N	95.5W	32.8N	95.5W	95	HO 100 N N 84 284	17: 7:42	122 137 45 85
34	42	USA-KANSAS	OTTOBATA RIVER/WHITE R	42.5N	103.5W	44.4N	101.6W	80 SE	LO 100 N N 84 284	18:32:34	124 138 48 85
34	43	USA-FLORIDA	CAPE SAN BLAS/COASTLINE	38.5N	85.5W	40.0N	85.6W	80 S	LO 100 N N 84 284	18:34:10	123 134 42 86
34	44	USA-FLORIDA	CAPE SAN BLAS/COASTLINE	30.0N	85.5W	33.0N	86.3W	60 SE	HO 100 N N 84 284	18:36:31	122 138 48 86
34	45	USA-FLORIDA	CAPE SAN BLAS/FIRE	30.0N	87.5W	31.7N	87.1W	70 S	LO 100 N N 84 284	18:36:56	122 140 48 86
34	46	USA-FLORIDA	KENNEDY SPACE CENTER	30.0N	85.5W	29.4N	85.1W	15	NV 100 N N 84 284	18:37:40	122 141 50 86
34	47	USA-CALIFORNIA	SALTON SEA/PINTO MTS	34.0N	115.5W	38.3N	114.1W	15 SW	LO 100 N N 84 284	20: 4:21	123 142 51 86
34	48	PACIFIC OCEAN	CLOUDS AND WATER	9.4S	105.7W	9.4S	105.7W	50	HO 100 N N 84 284	21:47:1	123 137 45 87
34	49	PACIFIC OCEAN	TEXTURAL DISCONTINUITY	10.8S	105.0W	10.8S	105.0W	30	HO 100 N N 84 284	21:47:24	120 148 48 88
34	50	PACIFIC OCEAN	TOWERING CUMULUS	24.5S	95.9W	24.5S	95.9W	80	HO 100 N N 84 284	21:47:24	120 148 48 88
34	51	ARGENTINA	PATAGONIA/GULF SAN JORGE	48.0S	98.0W	48.1S	98.0W	40 E	LO 100 N N 84 284	21:51:34	122 143 34 88
34	52	ARGENTINA	PATAGONIA/GULF SAN JORGE	45.5S	87.5W	45.5S	87.5W	40 NE	HO 100 N N 84 284	21:59:15	126 128 11 88

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC%	DR	TL	FL	E	S	DATE	GKT	ALT	NADIR AZI	ELE	ORB
34	53	ARGENTINA	PATAGONIA/CERRO PIEDRA	48.5S 69.5W	47.0S 71.0W	30	E	L0	100	N	N	84 284	21:59:13	126	127	10	88
34	54	ATLANTIC OCEAN	MOORISE	50.3S 64.0W	50.3S 64.0W	30	E	H0	100	N	N	84 284	22: 0:41	126	121	5	88
34	55	FALKLAND ISLANDS	JASON ISLANDS/CARCASS I	51.5S 60.0W	51.2S 61.9W	70	E	L0	100	N	N	84 284	22: 1: 5	126	119	4	88
34	56	PACIFIC OCEAN	SPIRAL EDDIES	30.7N 154.0W	30.7N 154.0W	10	SW	L0	100	N	N	84 284	23: 3:57	122	140	-0	89
34	57		UNEXPOSED	53.8S 76.2W	53.8S 76.2W	15	N	L0	100	N	N	84 284	23:31:27	127	113	-0	89
34	58	SCOTLAND	GRAMPIAN	57.5N 2.0W	56.1N 1.4W	15	N	L0	100	N	N	84 285	9:15:20	126	102	19	96
34	59	SCOTLAND	FIRTH OF FORTH	56.0N 3.0W	56.0N 0.6W	20	W	L0	100	N	N	84 285	9:15:27	126	103	19	96
34	60	SCOTLAND	BORDERS	55.5N 2.5W	55.8N 0.6E	30	W	L0	100	N	N	84 285	9:15:39	126	104	20	96
34	61	NETHERLANDS	IJSELMEER/CLOUDS/HAZE	53.0N 5.5E	54.9N 6.0E	50	SW	L0	100	N	N	84 285	9:16:28	125	109	22	96
34	62	USSR	CARPATHIAN MOUNTAINS	49.6N 22.6E	49.6N 22.6E	30						100 N N 84 285	9:19:23	125	122	31	96
34	63	USSR	CARPATHIAN MOUNTAINS	48.3N 25.5E	48.3N 25.5E	20						100 N N 84 285	9:19:59	124	125	33	96
34	64	USSR	CARPATHIAN MOUNTAINS	48.1N 25.8E	48.1N 25.9E	20						100 N N 84 285	9:20: 4	124	125	34	96
34	65	EGYPT	LIBYAN DESERT/NILE RIVER	29.0N 28.0E	35.1N 43.7E	0	SW	H0	100	N	N	84 285	9:24:48	122	138	47	96
34	66	EGYPT	LIBYAN DESERT/NILE RIVER	29.0N 28.0E	34.6N 44.3E	0	SW	H0	100	N	N	84 285	9:24:59	122	138	47	96
34	67	SAUDI ARABIA	RAS TANNURAH/BAHRAIN	26.5N 50.0E	26.4N 51.3E	0	SW	L0	100	N	N	84 285	9:27:34	121	142	52	96
34	68	ENGLAND	ISLE OF WIGHT	50.5N 2.0W	50.4N 1.8W	15	NV	L0	100	U	Y	84 285	10:47:55	125	121	30	97
34	69	ENGLAND	ISLE OF WIGHT	51.0N 1.0W	50.3N 1.3W	10	NV	L0	100	U	Y	84 285	10:48: 0	125	121	31	97
34	70	ENGLAND	STRAIT OF DOVER	51.0N 1.0E	49.3N 0.7E	15	N	L0	100	N	N	84 285	10:48:26	125	123	32	97
34	71	ITALY	CLOUDS	42.5N 12.5E	42.5N 12.4E	95	NV	L0	100	N	N	84 285	10:51: 8	123	132	40	97
34	72	ITALY	CLOUDS	43.0N 12.0E	42.8N 12.1E	90	NV	L0	100	N	N	84 285	10:51: 3	123	132	40	97
34	73	SICILY	TYRRHENIAN SEA SUNGLINT	39.0N 15.0E	40.5N 15.1E	70	SW	L0	100	N	N	84 285	10:51:52	123	134	42	97
34	74	ATLANTIC OCEAN	MATURE CYCLONE	51.0N 25.7W	51.0N 25.7W	90	H0	100	N	N	N	84 285	12:16:33	125	120	29	98
34	75	PORTUGAL	COASTLINE/CID VORTICIES	38.0N 10.0W	40.9N 7.9W	40	SW	H0	100	N	N	84 285	12:20:37	123	134	42	98
34	76	SPAIN	GULF OF CADIZ/CID EDDIES	35.5N 7.0W	39.7N 6.4W	0	SW	H0	100	N	N	84 285	12:21: 2	123	135	43	98
34	77	SPAIN	ST OF GIBRALTAR EDDIES	36.0N 6.5W	39.2N 5.8W	0	SW	L0	100	N	N	84 285	12:21:13	123	135	43	98
34	78	SPAIN	ST OF GIBRALTAR EDDIES	36.0N 6.0W	38.9N 5.4W	0	SW	L0	100	N	N	84 285	12:21:19	123	135	43	98
34	79	SPAIN	ST OF GIBRALTAR EDDIES	36.0N 6.0W	38.9N 5.4W	0	SW	L0	100	N	N	84 285	12:21:20	123	135	43	98
34	80	SPAIN	ST OF GIBRALTAR EDDIES	36.0N 5.5W	38.0N 4.4W	0	SW	L0	100	N	N	84 285	12:21:38	123	136	44	98
34	81	SPAIN	ST OF GIBRALTAR EDDIES	36.0N 5.0W	37.5N 3.8W	0	SW	L0	100	N	N	84 285	12:21:48	123	136	45	98
34	82	SPAIN	STRAIT OF GIBRALTAR	36.0N 6.0W	37.2N 3.5W	0	SW	L0	100	N	N	84 285	12:21:54	123	136	45	98
34	83	MOROCCO	AL HOCEIMA	35.5N 4.0W	38.5N 2.8W	0	SW	L0	100	N	N	84 285	12:22: 7	122	137	46	98
34	84		UNEXPOSED	51.0N 1.5E	49.1N 37.6S	0.0	NE	L0	250	N	N	84 285	23:28:26	124	43	-45	105
34	85	ENGLAND	STRAIT OF DOVER	48.5N 1.0E	47.8N 51.7E	50	NE	L0	250	F	N	84 286	10:30:46	124	123	31	113
34	86	FRANCE	CHARTRES	41.0N 14.0E	40.8N 13.4E	40	NW	L0	250	F	N	84 286	10:31:18	124	125	32	113
34	87	ITALY	NAPOLI/MOUNT VESUVIUS	41.0N 14.0E	40.6N 13.7E	40	NV	250	N	Y	84 286	10:33:59	123	134	41	113	
34	88	ITALY	NAPOLI/MOUNT VESUVIUS	41.0N 14.0E	40.6N 13.7E	40	NV	250	N	Y	84 286	10:34:03	123	134	41	113	
34	89	ITALY	NAPOLI/MOUNT VESUVIUS	41.0N 14.5E	40.2N 14.3E	40	NV	250	N	Y	84 286	10:34:13	123	134	42	113	
34	90	ITALY	NAPOLI/MOUNT VESUVIUS	41.0N 14.5E	40.0N 14.4E	50	NW	250	N	Y	84 286	10:34:16	123	134	42	113	
34	91	ITALY	NAPOLI/MOUNT VESUVIUS	40.5N 14.5E	39.9N 14.6E	50	NW	250	N	Y	84 286	10:34:19	123	134	42	113	
34	92	SICILY	MOUNT ETNA SMOKE/CATANIA	37.5N 15.0E	38.7N 16.0E	20	NV	250	N	Y	84 286	10:34:44	123	135	43	113	
34	93	SICILY	MOUNT ETNA SMOKE/CATANIA	37.5N 15.0E	38.4N 16.3E	20	NV	250	N	Y	84 286	10:34:49	123	136	44	113	
34	94	IONIAN SEA	WATER AND CLOUDS	38.1N 16.6E	38.1N 16.6E	10	SW	L0	250	N	N	84 286	10:34:55	123	136	44	113
34	95	MADAGASCAR	BANC INTERMEDIARE EDDIES	12.5S 48.5W	12.7S 51.7E	5	E	L0	250	F	N	84 286	10:50:20	120	146	52	113
34	96	PORTUGAL	LISBOA	38.5N 9.0W	38.7N 8.5W	5	E	L0	250	F	N	84 286	12: 3:36	123	135	43	114
34	97	SPAIN	SHIP WAKE/OCN STRUCTURE	36.5N 6.5W	38.0N 5.6W	0	SW	L0	250	F	N	84 286	12: 3:52	122	136	44	114
34	98	SPAIN	STRAIT OF GIBRALTAR EDDY	36.0N 5.0W	37.3N 4.8W	15	SW	L0	250	F	N	84 286	12: 4: 6	122	136	45	114
34	99	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.5W	35.9N 3.5W	5	W	L0	250	F	N	84 286	12: 4:33	122	137	46	114
34	100	AZORES	ILHA DE SAO MIGUEL	38.0N 25.5W	36.7N 26.8W	20	NE	L0	250	F	Y	84 286	13:33:11	122	137	45	115
34	101	AZORES	ILHA DE SAO MIGUEL	38.0N 26.0W	36.4N 26.6W	15	NE	L0	250	F	Y	84 286	13:33:16	122	137	46	115
34	102	AZORES	ILHA DE SAO MIGUEL	38.0N 26.0W	36.2N 26.3W	20	N	L0	250	F	N	84 286	13:33:21	122	137	46	115

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	NADIR LAT	NADIR LON	CC% DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB				
34	103 AZORES		ILHA DE SAO MIGUEL	38.0N	26.0W	35.1N	30 NW	LO 250 F N	84 288	13133143	122	138	47	115	
34	104 AZORES		ILHA DE SAO MIGUEL	38.0N	26.5W	34.5N	30 NW	LO 250 F N	84 288	13133154	122	138	47	115	
34	105		FILE			28.1N	17.3W	250 N	F N 84 288	13138135	121	142	55	115	
34	106 MAURITANIA		DHAR ADRAR	20.0N	13.0W	18.8N	0	NV 250 N	Y 84 288	13139128	120	144	58	115	
34	107 MAURITANIA		DHAR ADRAR	20.0N	13.0W	18.7N	0	NV 250 N	Y 84 288	13139128	120	144	58	115	
34	108 MAURITANIA		ABIDJAN/TREICHVILLE/CLOS	5.0N	4.0W	3.8N	0	NV 250 N	Y 84 288	13143131	120	144	58	115	
34	109 MAURITANIA		PIPMUACAN RESERVOIR	48.5N	70.5W	50.4N	30	NV 250 N	Y 84 288	13143117	119	148	61	115	
34	110 CANADA-Q		PIPMUACAN RESERVOIR	48.5N	70.5W	50.4N	30	NV 100 U	Y 84 288	14156150	124	121	28	116	
34	111 CANADA-Q		PIPMUACAN RESERVOIR	48.5N	70.5W	50.2N	30	NV 100 U	Y 84 288	14156154	124	121	28	116	
34	112 CANADA-PEI		PRINCE EDWARD ISLAND	48.5N	63.5W	50.0N	30	NV 100 U	Y 84 288	1415711	124	122	28	116	
34	113 CANADA-NS		CHIGNECTO BAY SUNGLINT	48.0N	84.5W	50.5W	30 SW	LO 100 N N			1	124	122	28	116
35	2 EQUADOR		ISLA PUNA/GUAYACUIL GULF	3.0S	80.5W	3.8S	50 SW	LO 100 N N							116
35	3 EQUADOR		ANDES MTS/VERY DARK	4.2S	78.7W	4.2S	50 NW	LO 250 F N	84 280	21118110	0	139	148	28	23
35	4 PERU		ANDES MTS/VERY DARK	4.7S	78.4W	4.7S	70	NV 250 F	Y 84 280	21118118	139	148	28	23	
35	5 PERU		ANDES MTS/VERY DARK	4.7S	78.4W	4.7S	70	NV 250 F	Y 84 280	21118118	139	148	28	23	
35	6 PERU		RIO MARANON/RIO SANTIAGO	4.8S	78.3W	4.9S	70	NV 250 F	Y 84 280	21118122	138	148	25	23	
35	7 PERU		COAST/RIO CHUQUICARA	4.5S	72.5W	5.7S	5	N	LO 250 U	84 280	21118137	138	148	25	23
35	8 PERU		CORD ORIENTAL/FIRES	8.5S	78.5W	7.9S	40 SW	LO 250 F	N 84 280	21119115	138	148	24	23	
35	9 PERU		CORD ORIENTAL/FIRES	8.5S	78.5W	8.8S	30	NV 250 F	Y 84 280	21119145	138	148	23	23	
35	10 PERU		CORD ORIENTAL/FIRES	8.8S	78.4W	9.8S	30	NV 250 F	Y 84 280	21118148	139	148	23	23	
35	11 PERU		CORDILLERA ORIENTAL	10.0S	75.3W	10.0S	30	NV 250 F	Y 84 280	21118153	139	148	22	23	
35	12 PERU		CORDILLERA VILCABAMBA	10.8S	74.8W	10.8S	30	NV 250 F	N 84 280	2112011	8	139	148	22	23
35	13 PERU		CORDILLERA VILCABAMBA	12.1S	74.0W	12.1S	25	NV 250 F	Y 84 280	21120130	139	148	21	23	
35	14 PERU		CORDILLERA VILCABAMBA	12.2S	73.8W	12.2S	25	NV 250 F	Y 84 280	21120133	139	148	21	23	
35	15 PERU		CORDILLERA VILCABAMBA	13.2S	73.3W	13.2S	25	NV 250 F	Y 84 280	21120151	140	145	20	23	
35	16 PERU		CORDILLERA VILCABAMBA	13.4S	73.2W	13.4S	25	NV 250 F	Y 84 280	21120154	140	145	20	23	
35	17 PERU		CORDILLERA VILCABAMBA	13.6S	73.1W	13.6S	30	NV 250 F	Y 84 280	21120157	140	145	20	23	
35	18 PERU		NEVADO CORPUENA	15.5S	72.5W	14.5S	30	LO 250 F	N 84 280	21120157	140	145	20	23	
35	19 PERU		NEVADO AMPATO	16.0S	72.0W	15.2S	30	LO 250 F	Y 84 280	2112128	140	145	18	23	
35	20 PERU		NEVADO AMPATO	16.0S	72.0W	15.4S	20	LO 250 F	Y 84 280	2112130	140	145	18	23	
35	21 PERU		NEVADO AMPATO	16.0S	72.0W	15.7S	20	NV 250 F	Y 84 280	2112135	140	145	18	23	
35	22 PERU		NEVADO CHACHANI/AREQUIPA	16.0S	71.5W	16.0S	10	NV 250 F	Y 84 280	2112152	140	145	18	23	
35	23 PERU		AREQUIPA	16.0S	71.5W	16.8S	5	NV 250 F	Y 84 280	2112155	140	145	18	23	
35	24 BOLIVIA		VOLCANOS AND SALARS	16.5S	68.0W	17.0S	1	NV 250 F	Y 84 280	2112158	140	145	18	23	
35	25 BOLIVIA		VOLCANOS AND SALARS	21.0S	68.0W	20.7S	10	NV 250 F	Y 84 280	2112318	140	144	15	23	
35	26 BOLIVIA		VOLCANOS AND SALARS	21.0S	68.0W	20.8S	10	NV 250 F	Y 84 280	21123110	140	144	15	23	
35	27 BOLIVIA		VOLCANOS AND SALARS	21.5S	68.0W	21.2S	5	NV 250 F	Y 84 280	21123114	140	144	15	23	
35	28 BOLIVIA		VOLCANOS AND SALARS	21.5S	68.0W	21.3S	5	NV 250 F	Y 84 280	21123117	140	144	15	23	
35	29		UNDEREXPOSED	21.5S	68.5W	21.5S	5	NV 250 F	Y 84 280	21123121	140	144	15	23	
35	30		UNDEREXPOSED			32.5S									
35	31		UNDEREXPOSED			33.2S									
35	32 URUGUAY		PUNTA DEL ESTE	35.0S	55.0W	33.7S	0	NV 250 U	N 84 280	2112711	142	139	5	23	
35	33 URUGUAY		CABO SANTA MARIA	35.0S	55.0W	36.7S	0	NV 250 F	N 84 280	21128111	142	137	3	23	
35	34 USSR		KAMCHATKA PEN/VOLCANOS	34.5S	54.0W	37.2S	0	NV 250 F	N 84 280	21128121	143	138	2	23	
35	35 USSR		KAMCHATKA PEN/VOLCANOS	56.5N	159.9E	56.5N	0	NV 250 F	N 84 280	21128126	143	79	18	24	
35	36 USSR		KAMCHATKA PEN/VOLCANOS	56.8N	161.1E	56.8N	0	NV 250 F	N 84 280	21128138	145	80	18	24	
35	37 PRIBILOF ISLANDS		SAINT GEORGE ISLAND	57.0N	170.0W	56.5N	30	LO 250 F	N 84 280	21128155	145	82	20	24	
35	38 SHUMAGIN ISLANDS		NAGAI ISLAND/BIRD ISLAND	56.5N	160.0W	55.8N	0	NE	LO 250 F	N 84 280	21128138	145	104	28	24
35	39 SHUMAGIN ISLANDS		NAGAI ISLAND/BIRD ISLAND	55.0N	160.0W	54.0N	0	NE	LO 250 F	N 84 280	21128138	145	104	28	24
35	40 PACIFIC OCEAN		CLOUDS AND WATER	55.0N	160.0W	53.5N	0	NE	LO 250 F	N 84 280	21128138	145	112	30	24
35				55.0N	160.0W	53.5N	60	NE	LO 250 F	N 84 280	21128138	145	112	30	24
35				47.5N	144.5W	47.5N	60	NE	LO 250 F	N 84 280	21128138	145	112	30	24
35				47.5N	144.5W	47.5N	60	NE	LO 250 F	N 84 280	21128138	145	112	30	24

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	CENTER POINT LON	NADIR LAT	NADIR LON	CC% DR TL FL	E S DATE	GMT	ALT	NAZIR AZI ELE ORB
35	41	PACIFIC OCEAN	CLOUDS AND WATER	45.2N	140.8W	45.2N	140.8W	15	250 N N 84 280	22:32:11	144	129 38 24
35	42	PACIFIC OCEAN	CLOUDS AND WATER	36.6N	129.8W	36.6N	129.8W	60	250 N N 84 280	22:35:16	142	137 38 24
35	43	USSR	GORA KONDOR CRATER	57.5N	134.5E	56.8N	137.9E	10 NW	LO 250 N N 84 280	23:52:1	9 145	80 19 25
35	44	SCOTLAND	ABROATH/COAST	56.5N	2.5W	56.8N	2.4W	40	NV 250 N Y 84 281	10:22:1	4 146	96 24 32
35	45	SCOTLAND	ABROATH/COAST	56.5N	2.5W	56.8N	1.5W	50	NV 250 N Y 84 281	10:22:11	146	97 24 32
35	46	SCOTLAND	ABROATH/COAST	56.5N	2.5W	56.7N	0.7W	10 W	LO 250 N N 84 281	10:22:18	146	98 25 32
35	47	ROMANIA	DANUBE RIVER MOUTH	45.0N	28.0E	47.5N	33.0E	40	LO 250 O Y 84 281	10:28:1	6 144	128 35 32
35	48	ROMANIA	DANUBE RIVER MOUTH	44.5N	28.5E	47.4N	33.2E	40	LO 250 O Y 84 281	10:28:1	8 144	128 35 32
35	49	ROMANIA	DANUBE RIVER MOUTH	44.0N	28.5E	47.2N	33.4E	40	LO 250 O Y 84 281	10:28:12	144	128 35 32
35	50	USSR	BLACK SEA FRONTAL DISCON	44.5N	33.0E	46.7N	34.4E	0 SE	LO 250 F N 84 281	10:28:25	144	127 38 32
35	51	TURKEY	BLACK SEA EDDIES	41.5N	37.5E	43.7N	39.2E	15 SE	LO 250 F N 84 281	10:29:35	144	131 37 32
35	52	TURKEY	BLACK SEA EDDIES	41.0N	38.0E	43.4N	39.8E	1 SE	LO 250 F N 84 281	10:29:43	144	131 37 32
35	53	TURKEY	LAKE VAN EDDIES	38.5N	43.0E	40.8N	44.3E	0 S	LO 250 U N 84 281	10:30:40	143	134 38 32
35	54	TURKEY	LAKE VAN EDDIES	38.5N	43.0E	40.1N	44.2E	0 S	LO 250 U N 84 281	10:30:55	143	134 38 32
35	55	IRAN	LAKE URMIA/REZAYEH	37.5N	45.5E	39.4N	45.0E	0 S	LO 250 U N 84 281	10:31:1	9 143	135 39 32
35	56	IRAN	COAST/PERSIAN GULF	29.0N	50.5E	32.3N	52.9E	1 SW	LO 250 O N 84 281	10:33:32	142	139 40 32
35	57	IRAN	PERSIAN G OIL FIRE-SLICK	30.0N	50.0E	31.9N	52.7E	1 SW	LO 250 O N 84 281	10:33:40	142	140 40 32
35	58	IRAN	PERSIAN GULF OIL SLICKS	29.0N	50.5E	30.8N	53.6E	0 SW	LO 250 O N 84 281	10:34:1	0 142	140 40 32
35	59	UNITED ARAB EMIRATES	COAST/PERSIAN GULF/FIRES	24.5N	52.5E	28.6N	54.7E	0 SW	LO 250 O N 84 281	10:34:25	141	141 40 32
35	60	UNITED ARAB EMIRATES	COAST/PERSIAN GULF	24.5N	52.0E	28.1N	55.1E	0 SW	LO 250 O N 84 281	10:34:35	141	141 40 32
35	61	OMAN	RUUS AL JIBAL/HORMUZ STR	26.5N	56.5E	28.2N	55.8E	0 SE	LO 250 F N 84 281	10:34:51	141	141 40 32
35	62	OMAN	RUUS AL JIBAL/HORMUZ STR	26.0N	58.0E	28.0N	56.0E	10 S	LO 250 N N 84 281	10:34:56	141	141 40 32
35	63	SAUDI ARABIA	PERSIAN GULF OIL SLICKS	26.5N	54.5E	27.6N	56.3E	0 SW	LO 250 F N 84 281	10:35:12	141	142 40 32
35	64	IRAN	QESHM/STR OF HORMUZ STRU	26.5N	55.0E	27.1N	56.7E	0 SW	LO 250 F N 84 281	10:35:12	141	142 40 32
35	65	SIRRI ISLAND	PERSIAN GULF OIL PATCHES	25.5N	54.5E	26.7N	57.0E	0 SW	LO 250 F N 84 281	10:35:19	141	142 40 32
35	66	OMAN	COASTLINE	25.4N	58.0E	25.4N	58.0E	0 S	LO 250 N N 84 281	10:35:44	141	142 40 32
35	67	OMAN	METRAH/SHIPS IN OMAN GUL	24.0N	58.5E	24.7N	58.6E	0 S	LO 250 F N 84 281	10:35:57	141	143 40 32
35	68	OMAN	SAND DUNES	23.4N	59.5E	23.4N	59.5E	0 S	LO 250 F Y 84 281	10:36:21	141	143 40 32
35	69	OMAN	COAST/AL MASIRAH	20.5N	58.5E	22.5N	60.2E	0 SW	LO 250 F N 84 281	10:36:38	140	143 39 32
35	70	OMAN	MASIRAH GULF	20.0N	58.0E	22.1N	60.4E	0 SW	LO 250 F N 84 281	10:36:45	140	144 39 32
35	71	OMAN	AL MASIRAH/ARABIAN SEA	20.5N	59.0E	21.6N	60.8E	0 SW	LO 250 F N 84 281	10:36:54	140	144 39 32
35	72	OMAN	SHIPWAKES OFF AL MASIRAH	20.5N	59.0E	21.2N	61.0E	0 SW	LO 250 F N 84 281	10:37:1	140	144 39 32
35	73	OMAN	AL MASIRAH/MASIRAH GULF	20.0N	58.5E	21.0N	61.2E	0 W	LO 250 F N 84 281	10:37:6	140	144 39 32
35	74	OMAN	KURIA MURIA BAY/ISLANDS	16.0N	55.0E	19.7N	62.1E	10 SW	LO 250 F N 84 281	10:37:29	140	144 39 32
35	75	MALDIVES	HAADUMATI ATOLL	2.0N	73.5E	3.2N	72.1E	5	NV 250 F N 84 281	10:42:24	139	146 33 32
35	76	CANADA-N	ISLAND OF NEWFOUNDLAND	48.5N	56.5W	51.9N	66.1W	50 SE	HO 250 F N 84 281	11:45:29	140	61 9 33
35	77	GREENLAND	OUT OF FOCUS	62.5N	43.0W	55.5N	52.0W	30 NW	LO 250 F N 84 281	11:50:4	139	86 20 33
35	78	GREENLAND	KONG FREDERIK VI KYST	63.5N	41.5W	57.0N	38.5W	50 NW	LO 250 F N 84 281	11:50:7	139	87 21 33
35	79	GREENLAND	KONG FREDERIK VI KYST	65.0N	40.0W	57.1N	35.5W	80 NW	HO 250 F N 84 281	11:50:13	139	87 21 33
35	80	GREENLAND	KONG FREDERIK VI KYST	65.0N	40.0W	57.1N	35.5W	80 NW	HO 250 F N 84 281	11:50:13	139	87 21 33
35	81	GREECE	MESSINAKOS BAY EDDIES	36.5N	22.0E	38.0N	23.8E	0 SW	LO 250 F N 84 281	12:11:12	129	136 39 33
35	82	ANDIKITHRON CHANNEL	EDDIES NEAR GREECE	37.6N	24.3E	37.6N	24.3E	0 SW	LO 250 F N 84 281	12:12:1	129	136 39 33
35	83	GREECE	ANDIKITHRON CHAN EDDIES	35.5N	23.0E	37.1N	24.8E	0 SW	LO 250 F N 84 281	12:13:02	130	137 39 33
35	84	GREECE	ANDIKITHRON CHAN EDDIES	35.5N	23.0E	36.9N	25.1E	0 SW	LO 250 F N 84 281	12:13:55	128	137 39 33
35	85	GREECE	MEDITERRANEAN EDDIES	35.0N	23.5E	36.7N	25.3E	0 SW	LO 250 F N 84 281	12:13:59	128	137 39 33
35	86	GREECE	MEDITERRANEAN EDDIES	34.5N	24.0E	36.4N	25.8E	0 SW	LO 250 F N 84 281	12:14:42	128	137 39 33
35	87	MEDITERRANEAN SEA	EDDIES NEAR LIBYAN COAST	34.0N	21.0E	36.2N	25.6E	0 SW	LO 250 F N 84 281	12:14:49	128	137 39 33
35	88	MEDITERRANEAN SEA	EDDIES NEAR LIBYAN COAST	33.5N	21.5E	35.8N	26.2E	0 SW	LO 250 F N 84 281	12:15:7	128	137 40 33
35	89	MEDITERRANEAN SEA	EDDIES NEAR LIBYAN COAST	33.5N	22.5E	35.3N	26.7E	0 SW	LO 250 F N 84 281	12:16:2	128	138 40 33
35	90	MEDITERRANEAN SEA	EDDIES NEAR LIBYAN COAST	33.0N	22.5E	35.0N	27.0E	0 SW	LO 250 F N 84 281	12:16:12	128	138 40 33

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE CRB
35	91	LIBYA	MEDITER SPIRAL EDDY FLD	32.0N 25.0E	34.8N 27.4E	0 SW	LO 250 F N 84 281	121 2120 128	138 40	33
35	92	EGYPT	MEDITER SPIRAL EDDY FLD	32.0N 25.5E	34.3N 27.7E	0 SW	LO 250 F N 84 281	121 2128 127	138 40	33
35	93	EGYPT	MEDITER SPIRAL EDDY FLD	32.0N 26.5E	33.9N 28.1E	0 SW	LO 250 F N 84 281	121 2135 127	138 40	33
35	94	EGYPT	MEDITER SPIRAL EDDY FLD	32.0N 28.0E	33.5N 28.5E	0 SW	LO 250 F N 84 281	121 2143 127	138 40	33
35	95	EGYPT	MEDITER SPIRAL EDDY FLD	31.5N 27.0E	32.8N 28.1E	0 SW	LO 250 F N 84 281	121 2155 127	138 40	33
35	96	EGYPT	ABUHASHIFA BAY EDDIES	31.5N 27.5E	32.5N 28.4E	0 SW	LO 250 F N 84 281	121 2155 127	138 40	33
35	97	EGYPT	NILE RIVER-LUXOR BEND	28.0N 32.5E	28.7N 34.3E	2 SW	LO 250 F N 84 281	121 4151 125	142 40	33
35	98	EGYPT	GULF OF SUZ/RED SEA	27.5N 34.0E	22.0N 37.7E	5 NW	LO 250 F N 84 281	121 8118 124	144 40	33
35	99	SUDAN	RED SEA OIL SLICKS	18.5N 37.5E	16.8N 38.2E	0 W	LO 250 F N 84 281	121 8157 123	144 39	33
35	100	SALDI ARABIA	COAST/GULF 1/SUBSURF STR	19.0N 41.0E	17.6N 40.7E	2 NE	LO 250 F N 84 281	121 7138 122	145 38	33
35	101	ETHIOPIA	ISLANDS/CORAL REEFS	15.5N 40.5E	15.5N 42.1E	0 W	LO 250 F N 84 281	121 8115 122	145 38	33
35	102	ETHIOPIA	AFAR DEPRESSION	12.0N 41.5E	11.8N 44.3E	5 W	LO 250 F N 84 281	121 9118 121	148 37	33
35	103	DJIBOUTI	AFAR DEPRESSION	12.0N 42.0E	11.6N 44.5E	5 W	LO 250 F N 84 281	121 9124 121	148 37	33
35	104	DJIBOUTI	AFAR DEPRESSION/LK ABBA	11.5N 42.5E	11.5N 44.8E	5 W	LO 250 F N 84 281	121 9127 121	148 37	33
35	105	ETHIOPIA	AFAR DEPRESSION/LK ABBE	11.5N 41.5E	11.8N 44.7E	5 W	LO 250 F N 84 281	121 9131 121	148 37	33
35	106	DJIBOUTI	AFAR DEPRESSION/LK ABBE	11.0N 41.5E	11.1N 44.8E	10 W	LO 250 F N 84 281	121 9134 121	148 37	33
35	107	DJIBOUTI	AFAR DEPRESSION	11.0N 42.0E	10.8N 44.8E	5 W	LO 250 F N 84 281	121 9137 121	148 37	33
35	108	SOMALIA	AFAR DEPRESSION	10.5N 43.0E	10.7N 45.0E	1 W	LO 250 F N 84 281	121 8140 121	148 37	33
35	109	ETHIOPIA	AFAR DEPRESSION	10.5N 42.0E	10.5N 45.1E	15 W	LO 250 F N 84 281	121 8144 121	148 38	33
35	110	ETHIOPIA	AFAR DEPRESSION/ANMAR MT	9.5N 42.0E	10.3N 45.2E	20 W	LO 250 F N 84 281	121 8147 121	148 38	33
35	111	ETHIOPIA	AFAR DEPRESSION/ANMAR MT	9.5N 43.0E	10.2N 45.3E	0 W	LO 250 F N 84 281	121 8150 121	148 38	33
35	112	DJIBOUTI	AFAR DEPRESSION	11.5N 42.5E	7.8N 48.7E	15 NW	LO 250 F N 84 281	121 10130 121	148 35	33
35	113	MASCARENE ISLANDS	RODRIGUEZ I/LAGOON TOPOG	20.0S 63.5E	18.1S 62.9E	10 NW	LO 250 F N 84 281	121 18128 120	144 20	33
36	2		OUT OF FOCUS/VERY DARK	45.0N 73.9W	45.0N 73.9W	250 U	N 84 280 1138118	185 50	5	17
36	3		OUT OF FOCUS/VERY DARK	45.8N 72.3W	45.8N 72.3W	250 U	N 84 280 1138138	185 51	6	17
36	4		OUT OF FOCUS/VERY DARK	45.8N 71.1W	45.8N 71.1W	250 U	N 84 280 1138158	185 52	7	17
36	5	OUTER HEBRIDES	NORTH UIST	57.5N 55.8N	55.8N 55.8N	60 NE	LO 250 N N 84 280 11491	1 187	104	28 17
36	6	SCOTLAND	CUMULUS WAVE PATTERN	56.0N 55.3N	55.3N 55.3N	80	LO 250 N Y 84 280 1149133	187	107	29 17
36	7	SCOTLAND	CUMULUS WAVE PATTERN	56.0N 55.1N	55.1N 55.1N	80	LO 250 N Y 84 280 1149143	187	108	28 17
36	8	IRELAND	DUBLIN/COASTLINE/CLOUDS	53.0N 6.0W	54.8N 3.8W	60 SW	LO 250 N N 84 280 1149157	187	109	29 17
36	9	NORTHERN IRELAND	BELFAST	54.5N 5.5W	54.7N 3.1W	70 SW	LO 250 N N 84 280 11501	4 187	108	30 17
36	10	SCOTLAND	CUMULUS WAVE PATTERN	56.0N 3.0W	54.4N 1.5W	80 NW	LO 250 N N 84 280 115017	187	111	30 17
36	11	ENGLAND	STRAIT OF DOVER	51.0N 1.5E	53.8N 0.3E	30 SE	LO 250 N N 84 280 1150138	187	112	30 17
36	12	ENGLAND	THE WASH	51.0N 1.5E	53.8N 1.1E	30 SE	LO 250 N N 84 280 1150148	187	113	31 17
36	13	ENGLAND	THE WASH	53.0N 0.5E	53.3N 2.1E	30 SW	LO 250 N N 84 280 1150158	187	114	31 17
36	14	NETHERLANDS	USSELMEER/CLOUDS	53.0N 5.0E	52.3N 5.3E	70 N	LO 250 N N 84 280 1151133	187	117	32 17
36	15	NETHERLANDS	COASTLINE/CLOUDS	52.0N 4.0E	52.0N 6.5E	80 W	LO 250 N N 84 280 1151148	187	118	32 17
36	16	NETHERLANDS	COASTLINE/CLOUDS	51.7N 7.3E	51.7N 7.3E	80 W	LO 250 N N 84 280 1151155	187	118	32 17
36	17	AUSTRIA	LAKE NEUSIEDLER	48.0N 17.0E	47.2N 17.4E	30 N	LO 250 N N 84 280 11541	1 188	128	35 17
36	18	YUGOSLAVIA	ADRIATIC SEA EDDIES	43.0N 15.5E	48.3N 18.1E	30 SW	LO 250 N N 84 280 1154124	188	128	35 17
36	19	GREECE	THERMAIKOS BAY EDDIES	40.0N 23.0E	48.8N 24.3E	5 SW	LO 250 N N 84 280 1155143	186	132	36 17
36	20	GREECE	THERMAIKOS BAY EDDIES	40.0N 23.5E	41.8N 25.9E	5 SW	LO 250 N N 84 280 11551	8 185	133	36 17
36	21	GREECE	AEGEAN SEA SPIRAL EDDIES	38.5N 24.5E	40.8N 27.0E	0 SW	LO 250 N N 84 280 1155129	185	134	36 17
36	22	GREECE	AEGEAN SEA SPIRAL EDDIES	38.5N 26.0E	40.3N 27.7E	0 SW	LO 250 N N 84 280 1155141	185	134	36 17
36	23	CRETE	MEDITER INTERNAL WAVES	35.0N 24.0E	38.5N 28.9E	0 SW	LO 250 N N 84 280 1157121	185	136	37 17
36	24	CYPRUS	OLYMPUS MOUNTAIN	35.0N 32.5E	35.4N 33.2E	1 SW	LO 250 N Y 84 280 1158124	185	138	37 17
36	25	CYPRUS	OLYMPUS MOUNTAIN	35.0N 33.0E	35.2N 33.4E	1 SW	LO 250 N Y 84 280 1158128	184	138	37 17
36	26	CYPRUS	OLYMPUS MOUNTAIN	35.0N 33.0E	35.0N 33.0E	1 SW	LO 250 N Y 84 280 1158133	184	138	37 17
36	27	LEBANON	BEIRUT/LEBANON MOUNTAINS	33.5N 35.5E	33.5N 35.1E	0 NV	250 N Y 84 280 11581	3 184	139	37 17
36	28	LEBANON	BEIRUT/LEBANON MOUNTAINS	33.5N 35.5E	33.4N 35.2E	0	250 N Y 84 280 11581	6 184	139	37 17

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	LONG	NADIR LAT	LONG	CC% DR TL FL E S DATE	GMT	ALT	NADIR AZI	ELE	ORB
38	28	LEBANON	LEBANON MOUNTAINS	33.5N	36.0E	33.2N	35.4E	0 NV 250 N Y 84 280 11:59:10	184	138	37	17	
38	30	SYRIA	ABAL AN MUSAYRIYAH/FIRES	36.0N	36.5E	32.0N	36.5E	2 N LO 250 F N 84 280 11:59:34	194	140	37	17	
38	31	SYRIA	LAKE ASSAD	36.0N	38.5E	31.6N	36.8E	0 NE LO 250 N Y 84 280 11:59:42	194	140	37	17	
38	32	SAUDI ARABIA	AL HURRAH	31.0N	38.5E	30.2N	38.0E	0 NV 250 N Y 84 280 12: 0: 8	194	140	37	17	
38	33	SAUDI ARABIA	AL HURRAH	31.0N	38.5E	30.0N	38.2E	0 NV 250 N Y 84 280 12: 0:12	194	141	37	17	
38	34	SAUDI ARABIA	RED SEA INTERNAL WAVES	26.5N	38.0E	28.2N	39.7E	0 LO 250 N Y 84 280 12: 0:47	194	141	36	17	
38	35	SOUTH YEMEN	WAHIDI/DISSECTED PLATEAU	15.5N	48.0E	15.9N	48.4E	0 NV 250 F N 84 280 12: 4:39	192	145	33	17	
38	36	SOUTH YEMEN	WAHIDI/DISSECTED PLATEAU	15.0N	48.5E	15.5N	48.6E	0 NV 250 N Y 84 280 12: 4:48	192	145	33	17	
38	37	SOUTH YEMEN	WAHIDI/DISSECTED PLATEAU	15.0N	48.5E	15.2N	48.8E	0 NV 250 N Y 84 280 12: 4:52	192	145	33	17	
38	38	SOUTH YEMEN	WAHIDI/DISSECTED PLATEAU	14.5N	49.0E	14.8N	49.1E	0 NV 250 N Y 84 280 12: 5: 0	192	145	33	17	
38	39	SOMALIA	AL BARI	11.5N	51.0E	11.4N	51.1E	0 NV 250 N Y 84 280 12: 5: 1	192	146	32	17	
38	40	SOMALIA	AL BARI	11.5N	51.0E	11.2N	51.3E	0 NV 250 N Y 84 280 12: 5: 6	192	146	32	17	
38	41	SPAIN	RIO EBRO MOUTH/SEDIMENT	40.5N	1.0E	42.3N	1.9E	10 SW LO 250 F N 84 280 13:27:30	196	132	36	18	
38	42	SPAIN	VALENCIA	39.5N	0.5E	41.4N	3.1E	1 SW LO 250 N Y 84 280 13:27:50	195	133	36	18	
38	43	BALEARIC ISLANDS	IBIZA/MEDITERRANEAN STRU	38.5N	1.5E	41.1N	3.6E	30 SW LO 250 N Y 84 280 13:27:58	195	133	36	18	
38	44	SPAIN	VALENCIA	39.5N	0.5E	40.3N	4.5E	2 SW LO 250 N Y 84 280 13:28:14	195	134	36	18	
38	45		OUT OF FOCUS			36.8N	8.8E	250 F N 84 280 13:28:30	185	137	37	18	
38	46	LIBYA	WAW AN NAMUS	25.0N	17.5E	25.7N	18.4E	0 NV 250 N Y 84 280 13:33: 8	193	142	36	18	
38	47	LIBYA	WAW AN NAMUS	25.0N	17.5E	25.5N	18.5E	0 NV 250 N Y 84 280 13:33:12	193	142	36	18	
38	48	LIBYA	SARIR OF SARRA/AIRSTRIIP	21.0N	23.0E	20.1N	22.4E	0 N LO 250 N Y 84 280 13:34:54	193	144	35	18	
38	49	LIBYA	SARIR OF SARRA	19.5N	22.8E	19.5N	22.8E	0 LO 250 N Y 84 280 13:35: 6	193	144	35	18	
38	50		VERY DARK			3.9N	32.3E	250 U Y 84 280 13:39:52	192	146	29	18	
38	51		VERY DARK			3.6N	32.5E	250 U Y 84 280 13:39:56	192	146	28	18	
38	52	USA-MONTANA	ROCKY MOUNTAINS/DARK	48.6N	113.9W	48.6N	113.9W	1 LO 250 U Y 84 280 14:42:53	195	55	8	19	
38	53	USA-MONTANA	ROCKY MOUNTAINS/DARK	48.7N	113.6W	48.7N	113.6W	10 LO 250 U Y 84 280 14:42:57	195	55	9	19	
38	54	GREENLAND	FREDERIKSHAB ICEFIELD	63.5N	48.0W	53.4N	44.6W	50 HO 250 N Y 84 280 14:54: 1	197	114	31	19	
38	55	GREENLAND	SOUTHERN COASTLINE	60.5N	44.0W	53.0N	43.1W	70 LO 250 N Y 84 280 14:54:17	197	115	31	19	
38	56	ATLANTIC OCEAN	WHITECAPS	30.0N	8.2W	30.0N	8.2W	2 W LO 250 N Y 84 280 15: 3:19	194	141	37	19	
38	57		VERY DARK			26.68	28.1E	250 U N 84 280 15:20:46	193	142	10	19	
38	58		VERY DARK			26.08	29.2E	250 U N 84 280 15:21:13	193	141	9	19	
38	59		VERY DARK			28.38	29.5E	250 U N 84 280 15:21:20	194	141	8	19	
38	60		VERY DARK			28.68	29.8E	250 U N 84 280 15:21:26	194	141	8	19	
38	61		VERY DARK			28.98	30.0E	250 U N 84 280 15:21:32	194	141	8	19	
38	62		VERY DARK			29.28	30.2E	250 U N 84 280 15:21:37	194	141	8	19	
38	63		VERY DARK			29.58	30.4E	250 U N 84 280 15:21:42	194	141	7	19	
38	64		VERY DARK			29.88	30.6E	250 U N 84 280 15:21:47	194	141	7	19	
38	65		SIR-B ANTENNA LATCH			54.9N	118.2W	250 U N 84 280 16:17:58	197	70	16	20	
38	66		OUT OF FOCUS			56.5N	107.6W	250 N Y 84 280 16:18:34	197	78	20	20	
38	67		OUT OF FOCUS			54.6N	95.8W	250 F N 84 280 17:56:19	197	110	30	21	
38	68		OUT OF FOCUS			51.6N	85.2W	250 F N 84 280 17:58:11	197	118	32	21	
38	69		OUT OF FOCUS			50.2N	81.7W	250 F N 84 280 17:58:53	197	121	33	21	
38	70		OUT OF FOCUS			48.4N	74.0W	250 F N 84 280 18: 0:34	196	128	35	21	
38	71		OUT OF FOCUS			45.3N	72.1W	250 F N 84 280 18: 1: 1	196	129	36	21	
38	72		OUT OF FOCUS			44.3N	70.5W	250 F N 84 280 18: 1:25	196	130	36	21	
38	73		OUT OF FOCUS			43.7N	69.7W	250 F N 84 280 18: 1:37	196	131	36	21	
38	74		OUT OF FOCUS			43.0N	68.7W	250 F N 84 280 18: 1:53	196	131	36	21	
38	75		OUT OF FOCUS			42.1N	67.4W	250 F N 84 280 18: 2:14	196	132	37	21	
38	76		OUT OF FOCUS			41.3N	66.4W	250 F N 84 280 18: 2:32	195	133	37	21	
38	77		OUT OF FOCUS			38.3N	62.7W	250 F N 84 280 18: 3:37	195	136	37	21	
38	78		OUT OF FOCUS			35.4N	59.6W	250 F N 84 280 18: 4:37	195	138	37	21	
38	79		OUT OF FOCUS			25.3N	50.9W	250 F N 84 280 18: 7:56	193	143	37	21	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	CENTER POINT LON	NADIR LAT	NADIR LON	CC% DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB
36	78	BRAZIL	OUT OF FOCUS	5.08	38.0W	2.4N	38.4W	50 SW	N 84 280	18:14:08	192	148 28 21
36	80	BRAZIL	SOUTH ATLANTIC/COASTLINE	13.08	38.5W	2.88	33.6W	50 SW	N 84 280	18:16:28	192	148 28 21
36	81	BRAZIL	SOUTH ATLANTIC/COASTLINE	13.08	38.5W	2.88	33.6W	50 SW	N 84 280	18:16:28	192	148 28 21
36	82	USA-ALASKA	HAGMEIBTER ISLAND	58.0N	180.5W	55.0N	184.4W	80 NE	N 84 280	18:18:52	192	148 21 21
36	83	USA-ALASKA	CP FAIRWEATHER/ELIAS MTS	58.0N	138.0W	57.1N	141.1W	80 NE	N 84 280	18:21:15	197	71 18 22
36	84	USA-ALASKA	CP FAIRWEATHER/ELIAS MTS	58.0N	138.0W	57.1N	141.1W	80 NE	N 84 280	18:24:33	187	91 23 22
36	85		OUT OF FOCUS	58.0N	138.0W	57.1N	141.1W	80 NE	N 84 280	18:25:18	187	91 23 22
36	86	CANADA-A	GULL LK/BYLVAN LK/AG	52.5N	114.0W	58.5N	131.2W	2 S	N 84 280	18:25:58	187	98 28 22
36	87	CANADA-B	OLD WIVES LAKE/AG	50.0N	108.0W	53.5N	114.6W	2 S	N 84 280	18:28:37	197	113 31 22
36	88	USA-FLORIDA	INDIAN RIVER/STUART	27.0N	80.0W	51.0N	107.1W	2 S	N 84 280	18:30:01	197	120 33 22
36	89	BAHAMAS	MAYAGUANA ISLAND	22.5N	73.0W	24.5N	73.6W	30 S	N 84 280	18:38:43	190	143 37 22
36	90	DOMINICAN REPUBLIC	BAHIA DE OCOA	18.0N	70.5W	21.2N	71.2W	20 S	N 84 280	18:40:47	188	144 38 22
36	91	DOMINICAN REPUBLIC	BAHIA DE OCOA	18.0N	70.5W	21.0N	71.0W	10 S	N 84 280	18:40:52	188	144 38 22
36	92	CARIBBEAN SEA	MOONRISE	17.7N	68.8W	17.7N	68.8W	40	N 84 280	18:41:52	188	145 35 22
36	93		ORBITAL REFUELING SYSTEM	43.5N	115.0W	43.5N	115.3W	60	N 84 280	18:48:15	177	148 24 22
36	94	USA-IDAHO	ANDERSON RANCH RESERVOIR	43.5N	115.0W	43.5N	115.3W	60	N 84 280	18:48:15	177	148 24 22
36	95	USA-IDAHO	CHARTERS OF MOON NATL MON	43.0N	113.5W	41.8N	113.3W	0	N 84 280	21:3:24	143	131 36 23
36	96	USA-UTAH	GREAT SALT LAKE (NORTH)	41.5N	113.0W	41.5N	113.3W	0	N 84 280	21:3:57	143	133 37 23
36	97	USA-UTAH	GREAT SALT LAKE (SOUTH)	41.0N	112.5W	40.4N	112.4W	5	N 84 280	21:4:12	143	133 37 23
36	98	USA-UTAH	SAN RAFAEL RIVER	38.5N	110.5W	38.7N	109.2W	5	N 84 280	21:4:30	143	134 37 23
36	99	USA-UTAH	GREEN R./COLO R JUNCTION	38.0N	110.0W	38.3N	108.8W	1	N 84 280	21:5:14	143	138 38 23
36	100	USA-UTAH	GREEN R./COLO R JUNCTION	38.0N	110.0W	38.0N	108.5W	2	N 84 280	21:5:20	142	138 38 23
36	101	USA-UTAH	LAKE POWELL	37.0N	111.0W	37.3N	107.7W	20 SW	N 84 280	21:5:35	142	138 38 23
36	102	USA-TEXAS	PECOS/PECOS RIVER	31.0N	103.5W	32.6N	103.1W	40 S	N 84 280	21:7:17	142	138 38 23
36	103	USA-TEXAS	OTZONA/PECOS RIVER	30.5N	101.5W	30.8N	101.5W	15	N 84 280	21:7:40	141	140 38 23
36	104	USA-TEXAS	ANISTAD RESERVOIR	29.5N	101.5W	29.5N	100.4W	40	N 84 280	21:8:18	141	141 38 23
36	105	USA-TEXAS	RIVERS/AGRICULTURE	28.8N	99.7W	28.8N	99.7W	70	N 84 280	21:8:21	141	141 38 23
36	106	USA-TEXAS	BIERRA MADRE RANGE	27.5N	101.5W	27.8N	98.0W	30 SW	N 84 280	21:8:39	141	141 38 23
37	2	MEXICO	EFFLUENT & SEDIMENT DEP	18.5N	92.0W	18.2N	92.0W	15	N 84 280	21:11:37	140	145 38 23
37	3	MEXICO	EFFLUENT & SEDIMENT DEP	18.5N	92.0W	18.0N	91.8W	10	N 84 280	21:11:40	140	145 38 23
37	4	MEXICO	PUNTA FRONTERA	18.5N	91.0W	17.8N	91.7W	15	N 84 280	21:11:45	140	145 38 23
37	5	MEXICO	RIO SAN ANTONIO/BALANCAN	18.0N	91.5W	16.7N	91.1W	20	N 84 280	21:12:12	140	145 35 23
37	6	MEXICO	BAY OF CAMPECHE	22.0N	94.0W	15.7N	90.4W	40	N 84 280	21:12:23	140	145 35 23
37	7	GUATEMALA	LAGO DE TZARAL/MOTAGUA R	15.5N	98.5W	15.2N	90.1W	70	N 84 280	21:12:32	140	145 35 23
37	8	HONDURAS	LAGO DE YOLJA	14.5N	98.5W	13.8N	99.2W	70	N 84 280	21:12:56	139	145 34 23
37	9	EL SALVADOR	RIO LEMPO/COASTLINE	13.5N	98.5W	13.2N	98.8W	80	N 84 280	21:13:18	139	145 34 23
37	10	MEXICO	BAY OF CAMPECHE	11.0N	96.5W	11.4N	97.7W	70	N 84 280	21:13:40	139	148 34 23
37	11	NICARAGUA	COASTLINE/NORTH PACIFIC	11.0N	96.5W	10.6N	97.3W	60	N 84 280	21:13:53	139	148 34 23
37	12		SHUTTLE OVER N PACIFIC	7.1N	85.2W	7.1N	85.2W	50	N 84 280	21:14:58	138	148 32 23
37	13	GUAYACIL	GUAYACIL	2.08	78.5W	2.58	78.8W	70	N 84 280	21:17:48	138	148 27 23
37	14	ECUADOR	ISLA PUNA/GUAYACIL GULF	3.08	80.0W	2.88	78.5W	50	N 84 280	21:17:53	139	148 27 23
37	15	ECUADOR	ANDES MOUNTAINS	3.88	78.8W	3.98	78.8W	80	N 84 280	21:18:13	139	148 28 23
37	16	PERU	RIO MARANON/RIO SANTIAGO	4.08	78.0W	4.38	78.8W	50	N 84 280	21:18:20	139	148 28 23
37	17	PERU	RIO MARANON/RIO SANTIAGO	4.58	78.5W	5.88	77.8W	40	N 84 280	21:18:43	139	146 25 23
37	18	PERU	RIO UCAYALI/CUSHABATAY R	7.08	76.0W	8.38	76.3W	80	N 84 280	21:18:31	139	148 23 23
37	19	PERU	CORO ORIENTAL/FIRES	10.78	74.0W	10.78	74.0W	80	N 84 280	21:20:13	139	148 22 23
37	20	PERU	CORO ORIENTAL/FIRES	11.08	74.7W	11.08	74.7W	70	N 84 280	21:20:19	139	148 22 23
37	21	PERU	CORO ORIENTAL/FIRES	11.38	74.5W	11.38	74.5W	70	N 84 280	21:20:25	138	148 22 23
37	22	PERU	CORO VILCABAMBA/FIRES	12.18	74.0W	12.18	74.0W	80	N 84 280	21:20:38	138	148 21 23
37	23	PERU	CORO VILCABAMBA/FIRES	12.48	73.0W	12.48	73.0W	80	N 84 280	21:20:43	138	148 21 23

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB
37	24	PERU	CORO VILCABAMBA/FIRES	12.7S 73.7W	12.7S 73.7W	60	NV 100 N Y 84 280	21:20:49	139	146 21 23
37	25	PERU	NEVADO AMPATO	16.0S 72.0W	15.3S 72.0W	60	NV 100 N Y 84 280	21:21:36	140	145 19 23
37	26	PERU	NEVADO AMPATO	16.0S 72.0W	15.6S 71.9W	50	NV 100 N Y 84 280	21:21:41	140	145 19 23
37	27	PERU	SOUTHERN LAKE TITICACA	16.0S 69.0W	16.4S 71.4W	70 SW	LO 100 N Y 84 280	21:21:55	140	145 18 23
37	28	BOLIVIA	SALAR DE COIPASA	19.0S 68.0W	20.1S 68.9W	70 NE	LO 100 N Y 84 280	21:23:3	140	144 16 23
37	29	BOLIVIA	SALAR DE COIPASA & UYUNI	19.5S 68.0W	20.4S 68.7W	70 NE	LO 100 N Y 84 280	21:23:8	140	144 15 23
37	30	BOLIVIA	SALAR DE COIPASA & UYUNI	20.5S 68.0W	20.7S 68.5W	60 NE	LO 100 N Y 84 280	21:23:13	140	144 15 23
37	31	BOLIVIA	VOLCANOS AND SALARS	22.0S 68.0W	22.3S 67.4W	40	NV 100 N Y 84 280	21:23:43	140	143 14 23
37	32	BOLIVIA	VOLCANOS AND SALARS	22.5S 67.0W	23.1S 66.8W	30	NV 100 N Y 84 280	21:23:57	140	143 13 23
37	33	BOLIVIA	VOLCANOS AND SALARS	23.0S 67.0W	23.4S 66.6W	30	NV 100 N Y 84 280	21:24:3	141	143 13 23
37	34	ARGENTINA	NEVADO DE CHANI	24.5S 65.8W	24.5S 65.8W	70	NV 100 N N 84 280	21:24:24	141	143 12 23
37	35		UNDEREXPOSED	31.0S 60.6W	31.0S 60.6W		100 U N N 84 280	21:26:26	142	140 7 23
37	36		UNDEREXPOSED	31.2S 59.1W	31.2S 59.1W		100 U N N 84 280	21:26:30	142	140 7 23
37	37		UNDEREXPOSED	32.7S 58.1W	32.7S 58.1W		100 U N N 84 280	21:27:0	142	139 6 23
37	38		UNDEREXPOSED	32.9S 58.9W	32.9S 58.9W		100 U N N 84 280	21:27:4	142	139 6 23
37	39		UNDEREXPOSED	36.3S 55.6W	36.3S 55.6W		100 U N N 84 280	21:28:10	142	137 3 23
37	40		UNDEREXPOSED	36.5S 55.3W	36.5S 55.3W		100 U N N 84 280	21:28:15	142	137 3 23
37	41	SAKHALIN ISLAND	TERPENIYA PENINSULA	50.0N 145.0E	52.2N 139.6E	50 SE	HO 100 O N 84 280	22:19:20	145	62 11 24
37	42	SAKHALIN ISLAND	TERPENIYA PENINSULA	50.0N 145.0E	52.5N 140.6E	50 SE	HO 100 O N 84 280	22:18:30	145	63 12 24
37	43	SAKHALIN ISLAND	KRILON PENINSULA	48.0N 142.5E	52.8N 141.3E	50 SE	HO 100 O N 84 280	22:19:38	145	63 12 24
37	44	SAKHALIN ISLAND	SOUTH HALF OF ISLAND	46.5N 142.5E	52.9N 141.8E	40 SE	HO 100 O N 84 280	22:19:43	145	64 12 24
37	45	USSR	KAMCHATKA PEN/VOLCANOS	56.0N 160.5E	56.5N 159.8E	80	NV 100 N Y 84 280	22:22:33	145	79 18 24
37	46	USSR	KAMCHATKA PEN/VOLCANOS	58.0N 160.5E	58.6N 160.8E	80	NV 100 N Y 84 280	22:22:42	145	80 19 24
37	47	BERING SEA	CLOUDS	57.1N 175.0E	57.1N 175.0E	95 NE	HO 100 N N 84 280	22:24:42	145	92 24 24
37	48	USA-ALASKA	BERING SEA/CLOUDS	56.9N 178.3E	56.8N 178.3E	90 NE	HO 100 N N 84 280	22:25:10	145	95 25 24
37	49	USA-ALASKA	BERING SEA/CLOUDS	56.9N 179.9W	56.8N 179.9W	90 NE	HO 100 N N 84 280	22:25:25	145	97 25 24
37	50	USA-ALASKA	HAGEMEISTER ISLAND	59.5N 161.0W	55.6N 169.8W	80 NE	HO 100 N N 84 280	22:26:54	145	105 28 24
37	51	USA-ALASKA	HAGEMEISTER I/BRISTOL B	59.5N 160.0W	53.9N 161.7W	70 NE	HO 100 N N 84 280	22:28:11	145	112 30 24
37	52	USA-ALASKA	ALASKA PEN/ISLANDS	56.0N 159.0W	53.6N 160.4W	70 NE	LO 100 N N 84 280	22:28:24	145	113 31 24
37	53	PACIFIC OCEAN	NORTH PACIFIC/CLOUDS	45.7N 141.6W	45.7N 141.6W	70	LO 100 N N 84 280	22:32:8	144	128 36 24
37	54	USSR	GORA KONDER CRATER	57.5N 134.5E	55.8N 132.5E	60 NE	LO 100 N N 84 280	23:51:29	145	75 17 25
37	55	USSR	BOLSHOY SHANTAR ISLAND	55.0N 137.0E	56.2N 134.9E	10 SE	LO 100 N N 84 280	23:51:51	145	77 18 25
37	56		ORBITER TAIL/CLOUDS	47.0S 136.8E	47.0S 136.8E		HO 100 N N 84 281	9:28:56	144	127 -4 31
37	57		SIR B ANT-OUT OF FOCUS	51.0S 145.4E	51.0S 145.4E		HO 100 F N 84 281	9:30:43	145	120 -8 31
37	58		ORBITER TAIL/CLOUDS	52.1N 22.2E	52.1N 22.2E		HO 100 N N 84 281	10:26:5	145	117 32 32
37	59	ROMANIA	DANUBE RIVER MOUTH	45.0N 29.0E	48.3N 31.4E	10	LO 100 N N 84 281	10:27:53	144	125 35 32
37	60	USSR	DNEPR RIVER MOUTH	46.0N 32.0E	47.2N 33.4E	10 SW	LO 100 N N 84 281	10:28:20	144	126 35 32
37	61	USSR	DNEPR RIVER	47.0N 33.0E	46.7N 34.4E	15 SE	LO 100 N N 84 281	10:28:33	144	127 36 32
37	62	USSR	LAKE SIVASH	46.0N 34.0E	46.5N 34.8E	5	NV 100 N N 84 281	10:28:39	144	127 36 32
37	63	USSR	LAKE MOLOCHNOYE	46.5N 35.5E	45.8N 35.8E	1	NV 100 N N 84 281	10:28:52	144	128 36 32
37	64	USSR	BERDYANSK/SEA OF AZOV	46.5N 36.5E	45.7N 36.1E	0 N	LO 100 N N 84 281	10:28:57	144	128 36 32
37	65	USSR	TAGANROGSKY BAY	46.5N 38.0E	45.4N 36.6E	0 NE	LO 100 N N 84 281	10:29:4	144	129 36 32
37	66	USSR	KERCHENSKIY STRAIT	45.0N 37.0E	45.0N 37.3E	0	NV 100 N N 84 281	10:28:14	144	129 37 32
37	67	USSR	CAUCASUS MOUNTAINS	44.5N 38.5E	44.6N 37.9E	2	NV 100 N Y 84 281	10:29:23	144	130 37 32
37	68	USSR	CAUCASUS MOUNTAINS	44.5N 38.5E	44.4N 38.3E	5	NV 100 N Y 84 281	10:29:29	144	130 37 32
37	69	USSR	CAUCASUS MOUNTAINS	44.5N 39.0E	44.0N 38.8E	10	NV 100 N Y 84 281	10:29:38	144	130 37 32
37	70	USSR	CAUCASUS MOUNTAINS	44.0N 39.5E	43.7N 38.3E	20	NV 100 N Y 84 281	10:29:44	144	131 37 32
37	71	USSR	CAUCASUS MOUNTAINS	44.0N 40.0E	43.4N 39.8E	30	NV 100 N Y 84 281	10:29:51	144	131 37 32
37	72	USSR	CAUCASUS MOUNTAINS	43.5N 40.5E	43.1N 40.2E	30	NV 100 N Y 84 281	10:29:58	143	131 37 32
37	73	USSR	CAUCASUS MOUNTAINS	43.5N 41.0E	42.8N 40.6E	30	NV 100 N Y 84 281	10:30:4	143	132 37 32

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	NADIR LAT	NADIR LON	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB
37	74 USSR		CAUCASUS MOUNTAINS	43.5N	41.0E	42.8N	40.9E	30	NV	100	N	Y	84 281	10:30:1	9 143	132	38	32
37	75 USSR		CAUCASUS MOUNTAINS	43.0N	41.0E	42.3N	41.3E	40	NV	100	N	Y	84 281	10:30:15	143	132	38	32
37	76 USSR		CAUCASUS MOUNTAINS	43.0N	42.0E	42.0N	41.6E	40	NV	100	N	Y	84 281	10:30:21	143	132	38	32
37	77 USSR		CAUCASUS MOUNTAINS	42.0N	43.5E	41.1N	42.9E	70	NV	100	N	Y	84 281	10:30:41	143	133	38	32
37	78 TURKEY		LAKE VAN	38.5N	43.0E	40.5N	43.7E	1 S	LO	100	N	N	84 281	10:30:55	143	134	38	32
37	78 TURKEY		LAKE VAN	38.5N	43.0E	40.5N	43.7E	1 S	LO	100	N	N	84 281	10:30:55	143	134	38	32
37	80 TURKEY		LAKE VAN/LAVA FLOWS	38.5N	44.0E	40.1N	44.1E	1 S	NV	100	N	Y	84 281	10:31:1	2 143	134	38	32
37	81 TURKEY		LAVA FLOWS/ARAS R VALLEY	40.0N	44.0E	38.7N	44.8E	5	NV	100	N	Y	84 281	10:31:11	143	135	38	32
37	82 TURKEY		GREAT ZAB RIVER/ERCEK LK	38.5N	44.5E	38.4N	45.0E	10	NV	100	N	Y	84 281	10:31:18	143	135	38	32
37	83 TURKEY		LAVA FLOWS/ARAB R VALLEY	40.0N	44.0E	38.8N	45.5E	5	NV	100	N	N	84 281	10:31:27	143	135	38	32
37	84 IRAN		LAKE ORUMIYEH	38.0N	45.5E	38.5N	45.7E	10 NE	LO	100	N	N	84 281	10:31:30	143	135	38	32
37	85 IRAN		LAKE ORUMIYEH	37.5N	45.5E	38.5N	46.1E	5	NV	100	N	N	84 281	10:31:37	143	138	38	32
37	86 IRAQ		NW ZAGROS MTS/TIGRES R	37.0N	45.5E	37.8N	46.9E	8 W	LO	100	N	N	84 281	10:31:51	143	136	38	32
37	87 IRAQ		NW ZAGROS MTS/TIGRES R	36.0N	44.0E	38.4N	45.0E	5 SE	LO	100	N	N	84 281	10:31:17	143	136	38	32
37	88 IRAQ		NW ZAGROS MTS/TIGRES R	36.0N	44.5E	37.2N	47.5E	15 E	LO	100	N	N	84 281	10:32:1	4 142	136	38	32
37	88 IRAQ		NW ZAGROS MTS/TIGRES R	36.0N	45.0E	36.9N	47.8E	20 E	LO	100	N	N	84 281	10:32:10	142	137	38	32
37	89 IRAQ		NW ZAGROS MTS/TIGRES R	36.0N	45.0E	36.6N	48.1E	25 E	LO	100	N	N	84 281	10:32:15	142	137	38	32
37	90 IRAQ		NW ZAGROS MTS/TIGRES R	36.0N	45.0E	36.3N	48.4E	30 E	LO	100	N	N	84 281	10:32:21	142	137	38	32
37	91 IRAQ		NW ZAGROS MTS/TIGRES R	35.5N	45.0E	36.0N	48.7E	30 W	LO	100	N	N	84 281	10:32:27	142	137	38	32
37	92 IRAQ		NW ZAGROS MTS/TIGRES R	35.0N	45.0E	35.7N	49.0E	30 W	LO	100	N	N	84 281	10:32:33	142	137	38	32
37	93 IRAQ		NW ZAGROS MOUNTAINS	34.8N	49.0E	34.9N	49.9E	60	LO	100	N	N	84 281	10:32:50	142	138	40	32
37	94 IRAN		DUST STORM/PERSIAN GULF	30.5N	49.5E	32.1N	52.5E	15 NW	LO	100	N	N	84 281	10:33:44	142	140	40	32
37	95 IRAN		DUST STORM/PERSIAN GULF	30.0N	49.5E	31.8N	52.7E	10 NW	LO	100	N	N	84 281	10:33:48	142	140	40	32
37	96 IRAN		DUST STORM/PERSIAN GULF	29.5N	50.5E	31.1N	53.4E	5 NW	LO	100	N	N	84 281	10:34:13	142	140	40	32
37	97 IRAN		DUST STORM/PERSIAN GULF	29.0N	50.5E	30.6N	53.9E	1 NW	LO	100	N	N	84 281	10:34:32	141	141	40	32
37	98 IRAN		ZAGROS MOUNTAINS	29.0N	52.5E	28.8N	54.7E	20 SW	LO	100	N	Y	84 281	10:34:38	141	141	40	32
37	99 IRAN		ZAGROS MOUNTAINS	29.0N	53.0E	29.3N	54.9E	15 SW	LO	100	N	Y	84 281	10:34:44	141	141	40	32
37	100 IRAN		ZAGROS MOUNTAINS	28.5N	53.0E	29.0N	55.2E	10 SW	LO	100	N	Y	84 281	10:34:52	141	141	40	32
37	101 IRAN		ZAGROS MOUNTAINS	28.0N	53.5E	28.6N	55.5E	5 SW	LO	100	N	Y	84 281	10:34:58	141	141	40	32
37	102 IRAN		ZAGROS MOUNTAINS	28.0N	54.0E	28.3N	55.8E	1 SW	LO	100	N	Y	84 281	10:34:58	141	141	40	32
37	103 IRAN		ZAGROS MOUNTAINS	27.5N	54.0E	28.0N	56.0E	1 SW	LO	100	N	Y	84 281	10:35:1	4 141	141	40	32
37	104 IRAN		ZAGROS MOUNTAINS	27.5N	54.5E	27.7N	56.3E	1 W	LO	100	N	Y	84 281	10:35:1	9 141	142	40	32
37	105 IRAN		ZAGROS MOUNTAINS	27.0N	55.0E	27.4N	56.5E	1 W	LO	100	N	Y	84 281	10:35:14	141	142	40	32
37	106 IRAN		ZAGROS MOUNTAINS	27.0N	55.5E	27.2N	56.8E	1 W	LO	100	N	Y	84 281	10:35:18	141	142	40	32
37	107 IRAN		ZAGROS MOUNTAINS	27.0N	56.0E	27.0N	56.8E	1	NV	100	N	N	84 281	10:35:22	141	142	40	32
37	108 UNITED ARAB EMIRATES		PERSIAN GULF OIL SLICKS	25.5N	54.5E	26.7N	57.1E	0 SW	LO	100	N	N	84 281	10:35:28	141	142	40	32
38	2 MADAGASCAR		MANDARE RIVER/LAC ANONY	25.0S	48.5E	28.2S	47.7E	30 NW	LO	250	F	N	84 281	10:35:35	122	141	12	34
38	3 CANADA-NF		ISLAND OF NEWFOUNDLAND	47.0N	56.0W	48.6N	56.8W	40	NV	250	N	N	84 281	18:24:55	125	127	36	36
38	4 CANADA-NF		ISLAND OF NEWFOUNDLAND	46.5N	55.5W	45.8N	55.8W	60 NE	LO	250	F	N	84 281	18:25:11	125	128	36	36
38	5 CANADA-NF		DAWSON BAY	53.0N	101.0W	55.0N	101.6W	0 S	LO	250	F	N	84 281	17:49:132	127	108	28	37
38	6 CANADA-NF		LAKE WINNIPEGOSIS	53.0N	100.0W	54.8N	100.7W	0 SE	LO	250	F	N	84 281	17:49:141	127	108	28	37
38	7 CANADA-H		LAKE WINNIPEG	53.0N	98.0W	54.5N	98.5W	0 S	LO	250	F	N	84 281	17:49:152	127	110	28	37
38	8 CANADA-H		LAKE WINNIPEG/LONG POINT	53.0N	98.0W	53.8N	98.8W	0 SW	LO	250	F	N	84 281	17:50:18	127	112	30	37
38	9 CANADA-Q		MONTREAL	45.5N	73.5W	45.1N	75.8W	10 NE	LO	250	F	Y	84 281	17:54:28	125	128	37	37
38	10 CANADA-Q		MONTREAL	45.5N	73.5W	44.8N	75.4W	10 NE	LO	250	F	Y	84 281	17:54:32	125	128	37	37
38	11 CANADA-Q		MONTREAL	45.5N	74.0W	44.6N	75.1W	10 NE	LO	250	F	Y	84 281	17:54:37	125	130	37	37
38	12 CANADA-Q		MONTREAL	45.5N	74.0W	44.4N	74.8W	15 NE	LO	250	F	Y	84 281	17:54:41	125	130	37	37
38	13 CANADA-Q		MONTREAL	45.5N	73.5W	44.3N	74.8W	15 NE	LO	250	F	Y	84 281	17:54:45	125	130	37	37
38	14 CANADA-Q		MONTREAL	45.5N	73.5W	43.8N	74.0W	15 N	LO	250	F	Y	84 281	17:54:54	125	131	37	37
38	15 USA-NEW YORK		LAKE CHAMPLAIN	44.0N	73.5W	43.3N	73.1W	10 NW	LO	250	F	N	84 281	17:55:1	7 129	131	38	37
38	16 USA-NEW HAMPSHIRE		WHITE MOUNTAINS	44.0N	71.0W	42.8N	72.3W	10 NE	LO	250	F	N	84 281	17:55:18	124	132	38	37

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	POINT LAT	NAOIR LAT	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NAOIR AZI	ELE	ORB
38	17	USA-NEW YORK	LONG ISLAND	40.5N	73.5W	42.4N	50	NW	LO	250	F	N	84	281	17:55:28	124	132	38
38	18	USA-MASSACHUSETTS	CAPE COD	42.0N	70.0W	42.1N	0	E	LO	250	F	N	84	281	17:55:34	124	132	38
38	19	USA-MASSACHUSETTS	BOSTON	42.5N	71.0W	41.7N	0	N	LO	250	F	N	84	281	17:55:41	124	133	38
38	20	USA-MASSACHUSETTS	BOSTON	42.5N	71.0W	41.5N	0	N	LO	250	F	N	84	281	17:55:48	124	133	38
38	21	USA-MASSACHUSETTS	CAPE COD	42.0N	70.0W	41.1N	0	N	LO	250	F	N	84	281	17:55:54	124	133	38
38	22	USA-MASSACHUSETTS	CAPE COD	41.5N	70.5W	41.0N	0	NV	250	F	N	84	281	17:55:58	124	133	39	
38	23	USA-MASSACHUSETTS	NEW BEDFORD	41.5N	70.5W	40.8N	0	NV	250	F	N	84	281	17:56:02	124	134	39	
38	24	USA-MASSACHUSETTS	BOSTON	42.5N	71.0W	40.4N	0	NW	LO	250	F	N	84	281	17:56:09	124	134	39
38	25	MEXICO	ALVARADO/RIO SAN JUAN	19.0N	96.0W	20.1N	5	N	LO	250	N	N	84	281	21:03:30	121	144	41
38	26	MEXICO	PUNTA FRONTERA	18.5N	92.5W	18.0N	10	E	LO	250	N	N	84	281	21:07:12	120	145	41
38	27	MEXICO	ISLA DEL CARMEN	18.5N	92.0W	17.6N	15	E	LO	250	N	N	84	281	21:11:14	120	145	40
38	28	MEXICO	LAGUNA INFERIOR	16.0N	85.0W	16.9N	5	NV	250	N	N	84	281	21:12:27	120	145	40	
38	29	PERU	RIO ICA/ICA/SAND DUNES	14.0S	76.0W	15.4S	2	NW	LO	250	N	N	84	281	21:10:59	120	145	24
38	30	PERU	RIO ICA/SAND DUNES	14.5S	76.0W	15.6S	10	NW	LO	250	N	N	84	281	21:11:11	120	145	24
38	31	ARGENTINA	LAVA FLOWS/SALARS	28.5S	67.5W	26.7S	40	NV	250	N	N	84	281	21:14:24	121	142	16	
38	32	ARGENTINA	LAVA FLOWS/SALARS	28.5S	67.5W	26.8S	40	NV	250	N	N	84	281	21:14:26	121	142	16	
38	33	ARGENTINA	LAVA FLOWS/SALARS	28.5S	67.5W	26.8S	40	NV	250	N	N	84	281	21:14:29	121	142	16	
38	34	ARGENTINA	LAVA FLOWS/SALARS	28.5S	67.5W	26.9S	40	NV	250	N	N	84	281	21:14:31	121	142	16	
38	35	ARGENTINA	BUENOS AIRES	34.5S	58.5W	35.3S	0	NW	LO	250	F	N	84	281	21:17:08	123	138	9
38	36	NORWAY	OSLO/TYRIFJORDEN	60.0N	10.5E	57.1N	0	NW	LO	250	F	N	84	282	8:35:43	128	90	20
38	37	NORWAY	HAMAR/RANDSFJORDEN	61.0N	11.0E	57.1N	0	NW	LO	250	F	N	84	282	8:35:48	128	91	20
38	38	NORWAY	OSLO/TYRIFJORDEN	60.0N	10.5E	57.1N	0	NW	LO	250	F	N	84	282	8:36:01	128	92	21
38	39	IRAN	PERSIAN GULF DYNAMICS	27.5N	52.0E	28.8N	1	W	LO	250	F	N	84	282	10:18:17	122	141	43
38	40	IRAN	SHEYKH SHOEYB I/EDDIES	26.5N	53.0E	27.8N	0	W	LO	250	F	N	84	282	10:18:24	122	142	43
38	41	PERSIAN GULF	WATER STRUCTURES	26.0N	54.5E	26.8N	0	SW	LO	250	F	N	84	282	10:18:43	122	142	44
38	42	IRAN	SIRRI/PERSIAN GULF	26.0N	55.5E	26.5N	0	SW	LO	250	F	N	84	282	10:18:50	122	142	44
38	43	IRAN	SIR BU NUAR/INTERNAL WV	25.5N	54.0E	26.1N	0	SW	LO	250	F	N	84	282	10:18:56	122	142	44
38	44	UNITED ARAB EMIRATES	BAZH AL GHARBI	24.5N	53.5E	25.4N	0	SW	LO	250	F	N	84	282	10:19:10	121	142	44
38	45	OMAN	COASTLINE/GULF OF OMAN	24.0N	57.5E	23.4N	0	NV	250	F	N	84	282	10:19:46	121	143	44	
38	46	OMAN	MUSCAT/SHIPS	23.5N	58.5E	22.9N	0	NV	250	F	N	84	282	10:19:56	121	143	44	
38	47	OMAN	RAS ABY DAUD/COASTLINE	23.0N	59.0E	22.0N	1	N	LO	250	F	N	84	282	10:20:13	121	144	44
38	48	OMAN	CAPE MADRAKAH/INTERNAL WVS	18.0N	58.0E	20.1N	0	SW	LO	250	F	N	84	282	10:20:47	121	144	43
38	49	OMAN	CAPE SHARBIHAT	18.0N	57.0E	19.5N	0	SW	LO	250	F	N	84	282	10:20:58	121	144	43
38	50	ITALY	GULF OF GENOA EDDIES	44.0N	9.0E	46.9N	0	SW	LO	250	F	N	84	282	11:40:46	125	127	36
38	51	ITALY	GULF OF GENOA EDDIES	44.0N	8.5E	46.5N	0	SW	LO	250	F	N	84	282	11:40:54	125	127	36
38	52	GULF OF VENICE	CLOUDS AND WATER	45.2N	12.8E	45.2N	20	LO	250	F	N	84	282	11:41:26	125	129	37	
38	53	ITALY	PO RIVER MOUTH PLUME	45.0N	12.5E	44.0N	10	SW	LO	250	F	N	84	282	11:41:54	124	130	38
38	54	GREECE	PELOPONNISOS/ARGOLIKOS B	37.5N	23.0E	38.1N	0	SE	LO	250	F	N	84	282	11:43:58	124	135	41
38	55	IONIAN SEA	INTERNAL WAVES/EDDIES	37.0N	21.0E	38.2N	5	SW	LO	250	F	N	84	282	11:43:58	123	136	41
38	56	IONIAN SEA	INTERNAL WAVES/EDDIES	36.5N	20.5E	38.1N	5	SW	LO	250	F	N	84	282	11:44:01	123	136	41
38	57	IONIAN SEA	INTERNAL WAVES/EDDIES	36.5N	20.5E	37.9N	10	SW	LO	250	F	N	84	282	11:44:03	123	136	41
38	58	IONIAN SEA	INTERNAL WAVES/EDDIES	36.0N	20.5E	37.8N	15	SW	LO	250	F	N	84	282	11:44:05	123	136	41
38	59	IONIAN SEA	EDDIES AND SHIPWAKES	35.5N	21.5E	37.1N	0	SW	LO	250	F	N	84	282	11:44:20	123	137	42
38	60	IONIAN SEA	EDDIES AND SHIPWAKES	35.5N	22.0E	36.8N	10	SW	LO	250	F	N	84	282	11:44:25	123	137	42
38	61	MEDITERRANEAN SEA	COMPLEX EDDY FIELD	35.3N	25.3E	35.3N	5	SW	LO	250	F	N	84	282	11:44:56	123	138	42
38	62	LIBYA	MEDITERRANEAN EDDY FIELD	32.5N	24.5E	34.7N	5	SW	LO	250	F	N	84	282	11:45:01	123	138	42
38	63	MEDITERRANEAN SEA	EDDY FIELD	32.5N	25.0E	34.0N	5	SW	LO	250	F	N	84	282	11:45:21	123	138	43
38	64	MEDITERRANEAN SEA	EDDY FIELD	32.5N	25.0E	33.5N	0	W	LO	250	F	N	84	282	11:45:32	122	139	43
38	65	EGYPT	CAPE ALAM EL RUM/EDDIES	31.5N	27.5E	32.2N	0	SW	LO	250	F	N	84	282	11:45:57	122	140	43
38	66	ETHIOPIA	AFAR DEPRESSION/DURBI V	13.5N	42.0E	13.3N	0	NV	250	F	N	84	282	11:51:43	120	145	43	

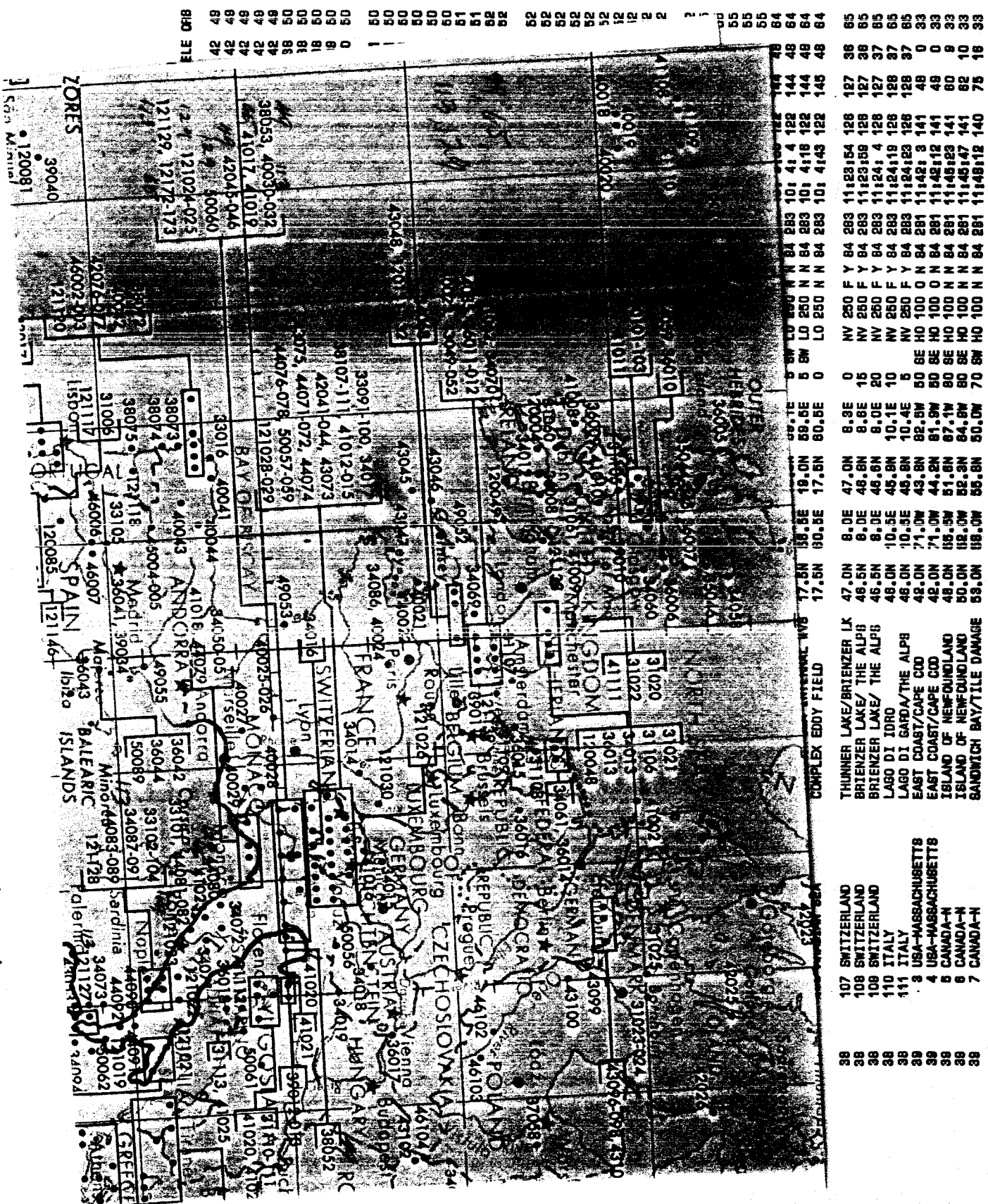


TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	CENTER POINT LON	NADIR LAT	NADIR LON	CC% DR TL FL	E S DATE	GMT	ALT	AZI ELE	ORB
39	8	ATLANTIC OCEAN	CLOUDS	56.8N	25.8W	56.8N	25.9W	80	HO	100 N N 84 281	11:51:39	138	96 24 33
39	9		OUT OF FOCUS			56.4N	20.6W			100 F N 84 281	11:52:24	138	100 25 33
39	10	SCOTLAND	COAST	54.5N	4.0W	53.3N	4.1E	80	LO	100 N N 84 281	11:54:55	136	114 31 33
39	11	FRANCE	TILE DAMAGE ON OMS PODS	50.3N	4.1E	50.3N	4.1E	80	LO	100 N N 84 281	11:56:30	134	121 33 33
39	12	ITALY	THE ALPS/CLOUDS	44.8N	14.6E	44.8N	14.6E	80	HO	100 N N 84 281	11:58:47	132	129 37 33
39	13	ITALY	THE ALPS/CLOUDS	44.8N	14.8E	44.8N	14.8E	80	HO	100 N N 84 281	11:58:50	131	129 37 33
39	14	ALBANIA	COAST/CLOUDS	41.0N	19.5E	40.2N	21.2E	70	SW	100 N N 84 281	12:01:31	130	134 38 33
39	15	GREECE	ISLANDS/BAYS/TILE DAMAGE	38.0N	23.0E	38.2N	22.4E	1	NV	100 N N 84 281	12:01:52	129	135 39 33
39	16	GREECE	ISLANDS/BAYS/TILE DAMAGE	38.0N	24.0E	38.5N	23.3E	0	NV	100 N N 84 281	12:01:52	129	135 39 33
39	17	GREECE	THESSALONIKI	40.5N	24.0E	37.7N	24.2E	15	LO	100 N N 84 281	12:01:52	129	136 39 33
39	18	GREECE	RODHOS I/SMOKE PLUME	36.0N	28.0E	34.3N	27.7E	0	N	100 N N 84 281	12:01:52	127	138 40 33
39	19	TURKEY	RODHOS I/SMOKE PLUME	37.0N	28.0E	32.8N	29.1E	1	N	100 N N 84 281	12:01:52	127	138 40 33
39	20	TURKEY	RODHOS I/SMOKE PLUME	36.5N	28.0E	32.2N	29.7E	1	NW	100 N N 84 281	12:01:52	127	138 40 33
39	21	CYPRUS	ISLAND/TURKEY/SYRIA	35.0N	33.0E	31.6N	30.2E	3	NE	100 N N 84 281	12:01:52	126	140 40 33
39	22	CYPRUS	ISLAND/TURKEY/SYRIA	35.0N	33.0E	30.3N	31.4E	3	NE	100 N N 84 281	12:01:52	126	140 40 33
39	23	EGYPT	SUEZ CANAL/MEDITERRANEAN	32.0N	32.0E	27.7N	33.5E	1	NW	100 N N 84 281	12:01:52	125	142 40 33
39	24	EGYPT	SUEZ CANAL/SINAI PEN	30.5N	32.5E	28.9N	34.1E	0	NW	100 N N 84 281	12:01:52	125	142 40 33
39	25	ISRAEL	GULF OF AQABA/DEAD SEA	30.0N	35.0E	25.8N	35.0E	0	N	100 N N 84 281	12:01:52	125	142 40 33
39	26	EGYPT	SINAI P/SUEZ & AQABA GUL	28.5N	34.0E	25.0N	35.0E	1	NW	100 N N 84 281	12:01:52	125	143 40 33
39	27	EGYPT	RED SEA/SAUDI ARABIA	27.0N	35.0E	22.1N	37.7E	0	NW	100 N N 84 281	12:01:52	124	144 40 33
39	28	DJIBOUTI	SOMALIA/ETHIOPIA/RED SEA	11.5N	43.0E	13.5N	43.3E	0	N	100 N N 84 281	12:01:52	122	145 38 33
39	29	SOUTH YEMEN	CAPE BAB EL MANDEB	13.0N	44.0E	12.6N	43.9E	0	NV	100 N Y 84 281	12:01:52	121	145 37 33
39	30	SOUTH YEMEN	CAPE BAB EL MANDEB	12.5N	44.0E	12.3N	44.1E	0	NV	100 N Y 84 281	12:01:52	121	145 37 33
39	31	SOUTH YEMEN	CAPE BAB EL MANDEB	12.5N	44.0E	12.0N	44.2E	0	NV	100 N Y 84 281	12:01:52	121	145 37 33
39	32	MASCARENE ISLANDS	RODRIGUEZ ISLAND	20.5S	63.5E	19.5S	63.0E	10	NV	100 N Y 84 281	12:01:52	120	144 18 33
39	33	MASCARENE ISLANDS	RODRIGUEZ ISLAND	20.5S	63.5E	18.8S	63.3E	15	NV	100 N Y 84 281	12:01:52	120	144 18 33
39	34	SPAIN	RIO EBRO MOUTH	40.5N	1.0E	38.6N	0.7W	0	N	100 N N 84 281	12:01:52	120	144 18 33
39	35	SPAIN	CABO DE PALOS/EDDIES	37.5N	0.0	36.6N	0.5E	1	S	100 N N 84 281	12:01:52	120	144 18 33
39	36	SPAIN	MEDITERRANEAN SEA	36.0N	1.0W	37.7N	1.6E	10	SW	100 N N 84 281	12:01:52	120	144 18 33
39	37	ALGERIA	MEDITERRANEAN SEA	36.0N	1.0W	37.4N	2.0E	15	SW	100 N N 84 281	12:01:52	123	136 39 34
39	38	ALGERIA	MEDITERRANEAN SEA	36.0N	1.0W	36.6N	2.8E	30	SW	100 N N 84 281	12:01:52	123	137 40 34
39	39	ALGERIA	MEDITERRANEAN SEA	36.5N	1.0E	35.7N	3.7E	40	SW	100 N N 84 281	12:01:52	123	137 40 34
39	40	AZORES	ATLANTIC OCEAN/CLOUDS	38.6N	21.9W	38.6N	21.9W	70	W	100 N N 84 281	12:01:52	124	135 38 35
39	41	CANARY ISLANDS	ATLANTIC OCEAN/CLOUDS	28.5N	18.0W	30.7N	14.1W	70	SW	100 N N 84 281	12:01:52	122	140 41 35
39	42	CANARY ISLANDS	ATLANTIC OCEAN/CLOUDS	28.5N	18.0W	28.9N	13.4W	70	SW	100 N N 84 281	12:01:52	122	141 41 35
39	43	AFRICA	CLOUDS & HAZE	11.1N	0.3W	11.1N	0.3W	80	HO	100 N N 84 281	12:01:52	120	146 37 35
39	44	AFRICA	CLOUDS & HAZE	10.6N	0.0	10.5N	0.0	80	HO	100 N N 84 281	12:01:52	120	146 37 35
39	45	AFRICA	CLOUDS & HAZE	10.1N	0.2E	10.1N	0.2E	80	HO	100 N N 84 281	12:01:52	120	146 37 35
39	46	NAHIBIA	ETOSHA PAN	19.0S	15.0E	17.7S	16.7E	1	SW	100 N N 84 281	12:01:52	120	145 21 35
39	47	NAHIBIA	ETOSHA PAN/SIR-B ANTENNA	19.0S	16.5E	18.9S	18.2E	10	NW	100 N N 84 281	12:01:52	120	144 20 35
39	48	CANADA-S	LAKES	54.5N	108.0W	56.6N	111.9W	10	SE	100 U N 84 281	16:15:54	128	80 17 36
39	49	CANADA-S	LAKES	54.5N	107.0W	56.7N	110.2W	10	SE	100 U N 84 281	16:15:54	128	81 18 36
39	50	CANADA-S	VERY DARK			56.8N	108.8W	0		100 U N 84 281	16:16:20	128	82 18 36
39	51	CANADA-S	VERY DARK			57.0N	105.0W	0		100 U N 84 281	16:16:52	128	86 20 36
39	52	CANADA-M	VERY DARK			57.1N	101.6W	0		100 U N 84 281	16:17:21	128	88 21 36
39	53	CANADA-M	LAKE WINNIPEG	54.5N	99.5W	57.1N	99.5W	20	LO	100 U N 84 281	16:17:38	128	91 22 36
39	54	CANADA-N	CLOUDS-DARK	46.4N	55.4W	46.4N	55.4W	80		100 U N 84 281	16:25:0	125	128 36 36
39	55	CANADA-N	CLOUDS-DARK	46.0N	54.7W	46.0N	54.7W	70		100 U N 84 281	16:25:10	125	128 36 36
39	56	CANADA-N	CLOUDS-DARK	45.5N	54.0W	45.5N	54.0W	70		100 U N 84 281	16:25:20	125	129 37 36
39	57	CANADA-S	VERY DARK			56.1N	108.5W	0		100 U N 84 281	17:48:30	127	102 26 37

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NAOIR LAT LON	CDS DR TL FL E S DATE	GMT	ALT	NAOIR AZI ELE OIB
38	58	CANADA-S	LAKES	55.0N 107.0W	56.0N 107.3W	10 S LO 100 U N 84 281	17:48:40	127	109 28 37
38	59	CANADA-H	LAKES	54.0N 101.5W	55.3N 103.1W	1 SW LO 100 U N 84 281	17:49:18	127	107 28 37
38	60	CANADA-H	LAKE WINNIPEG	53.5N 98.5W	54.8N 100.8W	10 E LO 100 U N 84 281	17:49:39	127	109 28 37
38	61	CANADA-H	LAKE WINNIPEG	54.0N 98.5W	54.6N 98.7W	0 E LO 100 U N 84 281	17:48:50	127	110 28 37
38	62	CANADA-H	LAKE WINNIPEG	54.0N 100.0W	54.4N 98.8W	0 NV 100 U N 84 281	17:48:58	127	111 28 37
38	63	CANADA-H	LAKE WINNIPEG	53.5N 98.0W	53.8N 98.8W	0 N LO 100 U N 84 281	17:50:18	127	112 30 37
38	64	CANADA-H	SANDY LAKE/SEVERN RIVER	52.5N 92.5W	52.0N 90.5W	10 W LO 100 U N 84 281	17:51:54	128	118 32 37
38	65	CANADA-H	LAKE WINNIPEG	54.0N 97.0W	51.8N 99.8W	20 NW HO 100 U N 84 281	17:51:51	128	118 32 37
38	66	CANADA-Q	MONTREAL	45.5N 74.0W	44.8N 75.4W	40 N LO 100 U N 84 281	17:54:32	125	128 37 37
38	67	CANADA-Q	MONTREAL	45.5N 73.5W	44.6N 75.1W	40 N LO 100 U N 84 281	17:54:37	125	130 37 37
38	68	CANADA-Q	MONTREAL	48.0N 73.0W	44.5N 74.8W	40 N LO 100 U N 84 281	17:54:40	125	130 37 37
38	69	CANADA-Q	MONTREAL	45.5N 74.0W	44.3N 74.6W	40 N LO 100 U N 84 281	17:54:44	125	130 37 37
38	70	USA-MASSACHUSETTS	CAPE COD	42.0N 70.5W	42.8N 72.2W	0 E LO 100 U N 84 281	17:55:22	124	132 38 37
38	71	USA-NEW YORK	LONG ISLAND	41.0N 73.0W	42.2N 71.5W	40 SW LO 100 U Y 84 281	17:55:31	124	132 38 37
38	72	USA-NEW YORK	LONG ISLAND	41.0N 73.0W	42.2N 71.5W	40 SW LO 100 U Y 84 281	17:55:33	124	132 38 37
38	73	USA-NEW YORK	LONG ISLAND	41.0N 73.0W	42.2N 71.5W	40 SW LO 100 U Y 84 281	17:55:33	124	132 38 37
38	74	USA-NEW YORK	LONG ISLAND	41.0N 73.0W	41.9N 71.0W	40 SE LO 100 U Y 84 281	17:55:37	124	133 38 37
38	75	USA-RHODE ISLAND	COAST/RHODE ISLAND SOUND	41.5N 71.5W	41.8N 70.8W	10 N LO 100 U Y 84 281	17:55:44	124	133 38 37
38	76	USA-MASSACHUSETTS	MARTHAS VINEYARD	41.5N 71.0W	41.5N 70.8W	0 NV 100 U Y 84 281	17:55:47	124	133 38 37
38	77	USA-MASSACHUSETTS	CAPE COD	41.5N 70.5W	41.4N 70.6W	0 NV 100 U Y 84 281	17:55:49	124	133 38 37
38	78	USA-MASSACHUSETTS	CAPE COD	41.5N 70.5W	41.3N 70.4W	0 NV 100 U Y 84 281	17:55:51	124	133 38 37
38	79	USA-MASSACHUSETTS	CAPE COD	41.5N 70.5W	41.0N 70.0W	0 NV 100 U Y 84 281	17:55:57	124	133 38 37
38	80	USA-MASSACHUSETTS	CAPE COD	42.0N 71.0W	40.8N 69.8W	0 N LO 100 U Y 84 281	17:56:10	124	134 38 37
38	81	USA-MASSACHUSETTS	CAPE COD	41.5N 70.5W	40.7N 69.8W	0 NV 100 U Y 84 281	17:56:13	124	134 38 37
38	82	PACIFIC OCEAN	STORM IN NORTH PACIFIC	50.5N 177.3E	50.5N 177.3E	100 HO 100 U N 84 281	18:18:35	127	58 8 38
38	83	PACIFIC OCEAN	STORM IN NORTH PACIFIC	51.0N 178.4E	51.0N 178.4E	100 HO 100 U N 84 281	18:18:35	127	58 8 38
38	84	USA-ALASKA	HAGENEISTER ISLAND	58.5N 151.0W	56.1N 151.1W	80 N LO 100 U N 84 281	18:18:35	127	58 8 38
38	85	USA-ALASKA	AKLUN MOUNTAINS/LAKES	60.5N 158.5W	58.2N 160.2W	70 NE LO 100 U N 84 281	18:18:37	127	78 16 38
38	86	USA-ALASKA	ALASKA PEN/NAKNEK LAKE	58.5N 158.5W	58.5N 157.5W	30 NE LO 100 U N 84 281	18:18:37	127	78 16 38
38	87	USA-ALASKA	ALASKA PEN/NAKNEK LAKE	58.0N 157.0W	58.6N 156.5W	40 N LO 100 U N 84 281	18:18:49	127	80 17 38
38	88	USA-ALASKA	ALASKA PEN/NAKNEK LAKE	58.5N 155.0W	58.8N 154.5W	30 NW LO 100 U N 84 281	18:18:49	127	80 17 38
38	89	USA-ALASKA	ALASKA PEN/NAKNEK LAKE	58.5N 155.0W	58.8N 154.5W	30 NW LO 100 U N 84 281	18:18:49	127	80 17 38
38	90	CANADA-BC	TESLIN LAKE	60.0N 132.0W	58.8N 131.4W	80 NW HO 100 U N 84 281	18:18:49	127	84 19 38
38	91	CANADA-NT	MACKENZIE MOUNTAINS	61.5N 123.5W	55.1N 124.5W	80 NW HO 100 U N 84 281	18:17:22	127	102 28 38
38	92	CANADA-NT	LAKE DIFFENBAKER	55.0N 105.0W	51.2N 110.9W	30 W LO 100 U N 84 281	18:18:24	127	108 28 38
38	93	USA-FLORIDA	PENSACOLA BAY/CLOUDS	30.5N 87.0W	33.8N 84.6W	80 SW LO 100 U N 84 281	18:20:43	128	119 38 38
38	94	USA-FLORIDA	CHOCTAWATCHEE BAY	30.5N 86.5W	33.0N 83.9W	80 SW LO 100 U N 84 281	18:21:18	128	138 41 38
38	95	USA-FLORIDA	LIGHTHOUSE POINT	30.0N 84.0W	31.4N 82.4W	80 SW LO 100 U N 84 281	18:21:33	128	138 41 38
38	96	BAHAMAS	BAHAMA IS/SOUTH Bimini	26.5N 78.5W	28.2N 78.7W	50 S LO 100 U N 84 281	18:28:15	122	140 41 38
38	97	BAHAMAS	ANDROS IS/SOUTH Bimini	26.0N 78.0W	27.9N 78.4W	50 S LO 100 U N 84 281	18:28:12	122	141 41 38
38	98	BAHAMAS	ANDROS ISLAND	24.0N 78.0W	27.1N 78.8W	80 S LO 100 U N 84 281	18:28:12	122	142 41 38
38	99	CUBA	ZAPATA PENINSULA/CLOUDS	22.0N 82.0W	24.5N 77.1W	30 SW LO 100 U N 84 281	18:28:25	122	142 41 38
38	100	CUBA	CAYO ROMANO/CLOUDS	22.0N 78.0W	24.0N 76.5W	40 SW LO 100 U N 84 281	18:30:23	121	143 41 38
38	101	CUBA	GUANTANAMO BAY	20.0N 75.5W	20.4N 74.0W	30 W LO 100 U N 84 281	18:31:28	121	144 41 38
38	102	HAITI	NORTHWEST PENINSULA	19.5N 72.5W	19.5N 73.4W	80 E LO 100 U N 84 281	18:31:28	121	144 41 38
38	103	HAITI	NORTHWEST PENINSULA	19.0N 74.0W	19.2N 73.1W	80 SW LO 100 U N 84 281	18:31:43	121	144 41 38
38	104	HAITI	CARIBBEAN SEA EDDIES	19.0N 75.0W	17.8N 72.3W	40 SW LO 100 U N 84 281	18:32:15	120	145 40 38
38	105	PUERTO RICO	ISLA MONA/MONA PASSAGE	18.0N 67.0W	15.8N 70.8W	70 NW HO 100 U N 84 281	18:32:15	120	145 40 38
38	106	LESSER ANTILLES	BOINAIRE	12.0N 69.0W	13.5N 69.5W	60 SW LO 100 U N 84 281	18:33:33	120	145 40 38
38	107	ATLANTIC OCEAN	CLOUDS AND WATER	27.88 43.7W	27.88 43.7W	20 HO 100 U N 84 281	18:45:50	122	142 15 38

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	MADIR LAT LON	CCX DR TL FL E S DATE	GMT	ALT	MADIR AZI ELE ORB
38	108	USA-UTAH	LAKE POWELL/CANYONLANDS	37.0N 111.0W	37.1N 110.6W	2	NV 100 N N 84 281 20:55: 8 123	137	40 38
40	3	ARGENTINA	CLOUDS	50.4S 65.1W	50.4S 65.1W	99	NV 100 N Y 84 285 21:42:56 126	121	9 104
40	4	ARGENTINA	CLOUDS	50.6S 64.7W	50.6S 64.7W	100	NV 100 N Y 84 285 21:43: 1 126	121	8 104
40	5	ARGENTINA	CLOUDS	50.8S 64.2W	50.8S 64.2W	100	NV 100 N Y 84 285 21:43: 7 126	120	7 104
40	6	FALKLAND ISLANDS	EAST FALKLAND	51.5S 58.5W	51.5S 61.5W	80	NV 100 N Y 84 285 21:43:37 127	118	7 104
40	7	USSR	STANOVY MTS/GONAM RIVER	56.0N 125.0E	56.1N 125.1E	5	NV 100 N Y 84 285 22:30:59 125	76	2 105
40	8	USSR	STANOVY MTS/GONAM RIVER	56.0N 125.5E	56.2N 126.1E	5	NV 100 N Y 84 285 22:31: 8 125	77	3 105
40	9	USSR	STANOVY MTS/GONAM RIVER	56.0N 126.0E	56.3N 126.7E	5	NV 100 N Y 84 285 22:31:13 125	78	3 105
40	10	USSR	STANOVY MTS/GONAM RIVER	56.0N 127.5E	56.3N 127.2E	10	NV 100 N Y 84 285 22:31:18 125	78	3 105
40	11	USSR	STANOVY MTS/GONAM RIVER	56.5N 127.5E	56.4N 127.7E	20	NV 100 N Y 84 285 22:31:22 125	78	4 105
40	12	PACIFIC OCEAN	CLOUDS & WATER	7.5S 131.0W	7.4S 130.8W	30	100 N N 84 285 22:57:34 120	146	53 105
40	13	SAUDI ARABIA	CARGO BAY/TAIR	34.3S 111.5W	34.3S 111.5W		100 F N 84 285 23: 5:46 123	138	30 105
40	14	SAUDI ARABIA	PORT COMPLEX/AL JUBAYL	27.0N 49.5E	28.0N 48.8E	0	NV 100 N Y 84 286 8: 8:15 121	141	53 112
40	15	SAUDI ARABIA	PORT COMPLEX/AL JUBAYL	27.0N 50.0E	27.6N 49.1E	0	NV 100 N Y 84 286 8: 9:22 121	142	53 112
40	16	SAUDI ARABIA	RAS TANNAH	26.5N 50.0E	27.3N 49.3E	0	NV 100 N Y 84 286 9: 9:27 121	142	53 112
40	17	SAUDI ARABIA	COASTLINE/BAHRAIN/DATAR	26.5N 50.5E	26.6N 49.8E	0	NV 100 N Y 84 286 8: 8:40 121	142	54 112
40	18	ATLANTIC OCEAN	STORM IN NORTH ATLANTIC	55.7N 22.6W	55.7N 22.6W	89	HO 100 N N 84 286 10:28:47 125	105	17 113
40	19	ATLANTIC OCEAN	STORM IN NORTH ATLANTIC	55.7N 22.0W	55.7N 22.0W	89	HO 100 N N 84 286 10:26:52 125	105	18 113
40	20	ATLANTIC OCEAN	STORM IN NORTH ATLANTIC	55.5N 21.1W	55.5N 21.1W	85	HO 100 N N 84 286 10:27: 0 125	106	18 113
40	21	CHANNEL ISLANDS	GUERNSEY & JERSEY IS	49.5N 2.5W	50.0N 1.8W	50	NV 100 N Y 84 286 10:30:17 124	122	29 113
40	22	CHANNEL ISLANDS	GUERNSEY & JERSEY IS	49.0N 2.0W	48.7N 1.3W	60	NV 100 N Y 84 286 10:30:24 124	122	30 113
40	23	ENGLAND	LONDON/CLOUDS	51.0N 0.5E	48.8N 0.4E	60	NV 100 N N 84 286 10:30:46 124	124	31 113
40	24	FRANCE	CHARTRES	48.5N 1.0E	48.2N 1.9E	70	NV 100 N N 84 286 10:31: 5 124	125	32 113
40	25	FRANCE	MONT AUVERGNE/MARY PEAK	45.0N 3.0E	46.8N 4.2E	70	SW LO 100 N N 84 286 10:31:38 124	127	34 113
40	26	FRANCE	MONT AUVERGNE/MARY PEAK	45.0N 3.0E	46.8N 4.8E	70	SW LO 100 N N 84 286 10:31:45 124	127	34 113
40	27	FRANCE	CEVENNES/GULF OF LION	44.0N 3.5E	46.1N 5.7E	50	SW LO 100 N N 84 286 10:31:58 124	128	35 113
40	28	FRANCE	DURANCE R/MARITIME ALPS	44.5N 6.0E	45.6N 6.5E	20	SW LO 100 N N 84 286 10:32: 8 124	129	35 113
40	29	FRANCE	DURANCE R/MARITIME ALPS	44.0N 6.0E	45.4N 6.8E	5	SW LO 100 N N 84 286 10:32:13 124	129	36 113
40	30	FRANCE	THE ALPS	45.0N 7.0E	45.1N 7.3E	10	NV 100 N Y 84 286 10:32:19 124	128	36 113
40	31	ITALY	TORINO/THE ALPS	45.0N 7.0E	44.8N 7.7E	0	NV 100 N Y 84 286 10:32:24 124	128	36 113
40	32	ITALY	TORINO/THE ALPS	45.0N 8.0E	44.6N 8.1E	1	NV 100 N Y 84 286 10:32:30 124	130	37 113
40	33	SICILY	MALTA CHANNEL STRUCTURES	36.5N 15.0E	36.6N 16.1E	20	SW LO 100 N N 84 286 10:34:41 123	135	43 113
40	34	LIBYA	PAYLAD BAY/RMS/SIR-B AN	32.5N 22.0E	34.0N 20.8E	10	NV 100 N N 84 286 10:36:12 122	138	48 113
40	35	LIBYA	JABAL AL AKHDAR	32.5N 22.0E	31.3N 23.4E	10	SW LO 100 N N 84 286 10:37: 5 122	140	50 113
40	36	CANADA-N	ONS PODS/RMS	58.5N 27.8N	57.1N 26.3E	20	NW LO 100 N N 84 286 10:38:10 121	142	53 113
40	37	CANADA-N	KOROC R/SAGLEK BAY	58.5N 64.0W	57.1N 62.2W	20	NW LO 100 N Y 84 286 11:53:14 126	90	8 114
40	38	CANADA-N	KOROC R/SAGLEK BAY	58.5N 63.0W	57.1N 61.6W	20	NW LO 100 N Y 84 286 11:53:19 126	90	8 114
40	39	CANADA-N	COASTLINE/PACK ICE	58.0N 61.5W	57.1N 60.6W	20	NW LO 100 N Y 84 286 11:53:27 126	81	9 114
40	40	CANADA-N	COASTLINE/PACK ICE	57.5N 61.5W	57.1N 60.2W	20	NW LO 100 N Y 84 286 11:53:31 126	82	8 114
40	41	SPAIN	NORTHWESTERN SPAIN	43.5N 7.5W	43.1N 12.1W	60	E HO 100 N N 84 286 12: 1:58 123	131	38 114
40	42	SPAIN	NORTHWESTERN SPAIN	43.0N 8.5W	42.3N 11.0W	30	NE LO 100 N N 84 286 12: 2:16 123	132	39 114
40	43	SPAIN	LEON PROVINCE	42.5N 6.5W	41.7N 10.2W	30	NE LO 100 N N 84 286 12: 2:28 123	133	40 114
40	44	SPAIN	CORUILLERA CANTABRICA	43.0N 5.5W	41.4N 9.8W	40	NE LO 100 N N 84 286 12: 2:35 123	133	40 114
40	45	SPAIN	GULF OF CADIZ INTERN WVS	37.0N 7.0W	38.6N 6.1W	0	SW LO 100 N N 84 286 12: 3:34 123	135	43 114
40	46	SPAIN	GULF OF CADIZ INTERN WVS	37.0N 7.0W	38.4N 6.1W	0	SW LO 100 N N 84 286 12: 3:38 123	136	44 114
40	47	SPAIN	GULF OF CADIZ INTERN WVS	36.5N 6.5W	37.8N 5.6W	0	SW LO 100 N N 84 286 12: 3:48 122	136	44 114
40	48	SPAIN	ST OF GIBRALTAR INT WVS	36.0N 6.5W	37.6N 5.3W	3	SW LO 100 N N 84 286 12: 3:54 122	136	44 114
40	49	MOROCCO	ST OF GIBRALTAR INT WVS	36.0N 6.0W	37.3N 4.9W	5	SW LO 100 N N 84 286 12: 4: 0 122	136	45 114
40	50	MOROCCO	MEDITERRANEAN SEA STRUCT	36.0N 5.5W	37.1N 4.7W	10	SW LO 100 N N 84 286 12: 4: 1 122	137	45 114
40	51	MOROCCO	MEDITERRANEAN SEA STRUCT	35.5N 5.0W	36.8N 4.5W	10	SW LO 100 N N 84 286 12: 4: 9 122	137	45 114

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S DATE	GMT	ALT	NADIR AZI ELE CRB
40	52	MOROCCO	MEDITERRANEAN SEA BTUUCT	35.5N 4.5W	36.8N 4.1W	10 SW LO 100 N 84 288	12 4:15	122	137 45 114
40	53		SIR-8 ANTENNA/JFC	19.08 31.5E	33.3N 0.9W	100 U N 84 288	13 5:18	122	138 48 114
40	54	MOZAMBIQUE	CABORA BASSA RESERVOIR	22.08 35.5E	18.28 30.8E	5 SE LO 100 N 84 288	13 19:52	120	145 51 114
40	55	MOZAMBIQUE	COAST/ISLAND		22.28 35.3E	50 NV 100 N 84 288	13 21:58	121	144 45 114
40	56		SIR-8 ANTENNA/DARK		30.68 41.8E	100 N 84 288	13 24:34	122	140 38 114
40	57	CANADA-BC	FIREB/UNDEREXP	56.9N 122.8W	56.7N 95.2W	100 N 84 288	13 20:39	125	81 3 114
40	58	CANADA-BC	CLOUDS/MOUNTAINS/DARK	56.7N 120.7W	56.7N 120.7W	100 U N 84 288	13 20:52	125	86 11 115
40	59	USA-MICHIGAN	MARQUETTE/SANWYER AFB	48.5N 87.5W	47.1N 88.3W	100 U N 84 288	13 21:18	125	88 12 117
40	60	CANADA-O	LONG POINT BAY	43.0N 80.5W	43.3N 80.2W	20 NV 250 N 84 288	13 22:14	124	127 33 117
40	61	CANADA-O	LONG POINT BAY	42.5N 80.5W	43.1N 79.8W	30 NV 250 N 84 288	13 23:31	123	131 38 117
40	62	USA-PENNSYLVANIA	ERIE/CONTRAILS	42.0N 80.0W	42.4N 78.8W	30 NV 250 N 84 288	13 23:37	123	131 38 117
40	63	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	41.0N 78.0W	41.5N 77.8W	5 W LO 250 N 84 288	13 23:51	123	132 38 117
40	64	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.3N 77.4W	5 W LO 250 N 84 288	13 24:12	123	133 40 117
40	65	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.3N 77.4W	2 W LO 250 N 84 288	13 24:15	123	133 40 117
40	66	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.1N 77.3W	2 W LO 250 N 84 288	13 24:17	123	133 40 117
40	67	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.1N 77.3W	2 W LO 250 N 84 288	13 24:17	123	133 40 117
40	68	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.1N 77.3W	2 W LO 250 N 84 288	13 24:17	123	133 40 117
40	69	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.1N 77.3W	2 W LO 250 N 84 288	13 24:17	123	133 40 117
40	70	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	40.5N 78.0W	41.1N 77.3W	2 W LO 250 N 84 288	13 24:17	123	133 40 117
40	71	USA-DIST OF COLUMBIA	WASHINGTON DC	38.0N 77.0W	40.1N 75.5W	0 W LO 250 N 84 288	13 25:30	123	134 41 117
40	72	USA-MARYLAND	BALTIMORE/CHESAPEAKE BAY	39.5N 76.5W	38.5N 75.1W	10 W LO 250 N 84 288	13 25:54	123	135 42 117
40	73	USA-MARYLAND	BALTIMORE/CHESAPEAKE BAY	39.0N 76.5W	38.2N 74.8W	10 W LO 250 N 84 288	13 26:10	123	135 43 117
40	74	USA-NORTH CAROLINA	THE EYE OF JOSEPHINE	35.1N 70.4W	35.1N 70.4W	88 250 N 84 288	13 26:22	122	138 47 117
40	75	USA-NORTH CAROLINA	THE EYE OF JOSEPHINE	34.8N 70.2W	34.8N 70.2W	88 250 N 84 288	13 26:26	122	138 47 117
40	76	SURINAME	LARGE FORMAT CAMERA OPEN	5.5N 57.0W	7.4N 50.3W	50 SW LO 250 N 84 288	13 26:50	118	146 82 117
40	77	SURINAME	COAST/ATLANTIC OCEAN	5.5N 57.0W	7.4N 50.3W	50 SW LO 250 N 84 288	13 26:50	118	146 82 117
40	78	FRENCH GUIANA	COAST/ATLANTIC OCEAN	5.5N 54.0W	7.0N 50.1W	50 SW LO 250 N 84 288	13 26:57	118	146 82 117
40	79	FRENCH GUIANA	COAST/ATLANTIC OCEAN	5.5N 53.0W	6.8N 50.0W	50 SW LO 250 N 84 288	13 26:57	118	146 82 117
40	80	FRENCH GUIANA	COAST/ATLANTIC OCEAN	5.5N 53.0W	6.7N 49.8W	70 SW LO 250 N 84 288	13 26:57	118	146 82 117
40	81	BRAZIL	COAST/ATLANTIC OCEAN	4.0N 51.0W	5.2N 48.0W	40 SW LO 250 N 84 288	13 26:57	118	146 82 117
40	82	BRAZIL	COAST/ATLANTIC OCEAN	4.0N 51.0W	5.1N 48.0W	40 SW LO 250 N 84 288	13 26:57	118	146 82 117
40	83	BRAZIL	COAST/ATLANTIC OCEAN	3.0N 51.0W	4.7N 48.7W	60 SW LO 250 N 84 288	13 26:57	118	146 82 117
40	84	ATLANTIC OCEAN	WATER AND CLOUDS	2.9N 47.8W	2.8N 47.8W	20 250 N 84 288	13 26:57	118	146 82 117
40	85	BRAZIL	COAST/ATLANTIC OCEAN	1.08 46.5W	0.78 45.6W	60 W LO 250 N 84 288	13 26:57	118	146 82 117
40	86	BRAZIL	COAST/TURNACU BAY COLOR	1.55 45.5W	1.38 45.2W	60 NV 250 N 84 288	13 26:57	118	146 82 117
40	87	BRAZIL	COAST/SAN MARCOS B COLOR	2.08 44.0W	2.88 44.4W	20 NV 250 N 84 288	13 26:57	118	146 82 117
40	88	BRAZIL	COAST/SAN MARCOS B COLOR	2.58 44.5W	2.88 44.4W	40 NV 250 N 84 288	13 26:57	118	146 82 117
40	89	BRAZIL	COAST/SAN MARCOS B COLOR	3.08 44.5W	3.88 43.9W	70 NV 250 F 84 288	13 26:57	118	146 82 117
40	90	BRAZIL	RIO NEARIN	3.58 44.5W	4.28 43.5W	80 NV 250 F 84 288	13 26:57	118	146 82 117
40	91	BRAZIL	SOBRADINHO RESERVOIR	9.08 41.0W	8.98 41.2W	80 NV 250 F 84 288	13 26:57	118	146 82 117
40	92	BRAZIL	SOBRADINHO RES/PETROLINA	9.58 41.0W	8.98 41.2W	80 NV 250 F 84 288	13 26:57	118	146 82 117
40	93	BRAZIL	FIREB	9.58 40.4W	8.98 40.4W	10 250 F 84 288	13 26:57	118	146 82 117
40	94	BRAZIL	SOBRADINHO RESERVOIR	10.08 41.5W	10.88 39.6W	30 NV 250 F 84 288	13 26:57	118	146 82 117
40	95	BRAZIL	SOBRADINHO RESERVOIR	10.08 41.5W	10.78 39.6W	30 NV 250 F 84 288	13 26:57	118	146 82 117
40	96	BRAZIL	SOBRADINHO RESERVOIR	10.08 41.5W	10.78 39.6W	30 NV 250 F 84 288	13 26:57	118	146 82 117
40	97	BRAZIL	SOBRADINHO RESERVOIR	10.08 41.5W	10.78 39.6W	30 NV 250 F 84 288	13 26:57	118	146 82 117
40	98	BRAZIL	SALVADOR/SANTOS BAY	13.08 38.5W	13.28 38.2W	50 NV 250 F 84 288	13 26:57	118	146 82 117
40	99	BRAZIL	SALVADOR/SANTOS BAY	13.08 38.5W	13.28 38.2W	50 NV 250 F 84 288	13 26:57	118	146 82 117
40	100	BRAZIL	SALVADOR/SANTOS BAY	13.08 38.5W	13.28 38.2W	50 NV 250 F 84 288	13 26:57	118	146 82 117
40	101	BRAZIL	SALVADOR/SANTOS B COLOR	13.08 38.5W	13.88 37.6W	50 NV 250 F 84 288	13 26:57	118	146 82 117

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	NADIR LAT	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB	
40	102	BRAZIL	ILHA DE TINHARE	13.5S	39.0W	14.2S	37.6W	10	NW	LO	250	F	N	84	286	16:46:13	120	145
40	103	BRAZIL	PONTA DO MITA	14.0S	39.0W	14.4S	37.5W	50	W	LO	250	F	N	84	286	16:48:17	120	145
40	104	USA-NEBRASKA	GRAND ISLAND/PLATTE R	41.0N	98.5W	40.3N	98.7W	0	NV	250	F	N	84	286	17:58:30	123	134	
40	105	USA-NEBRASKA	LINCOLN/CRETE	41.0N	97.0W	39.6N	97.8W	20	N	LO	250	F	N	84	286	17:58:45	123	135
40	106	USA-MISSISSIPPI	BAY ST LOUIS/GULFPORT	30.5N	89.5W	31.0N	89.0W	25	NV	250	F	N	84	286	18:1:38	122	140	
40	107	USA-ALABAMA	MOBILE BAY/BON SECOUR B	30.5N	88.0W	29.7N	88.0W	20	NV	250	F	N	84	286	18:1:59	121	141	
40	108	USA-FLORIDA	PENSACOLA/PENSACOLA BAY	30.5N	87.5W	29.2N	87.5W	25	NV	250	F	N	84	286	18:2:10	121	141	
40	109	USA-FLORIDA	CAPE CANAVERAL/CLOUDS	28.5N	80.5W	28.6N	80.5W	80	NE	LO	250	N	N	84	286	18:2:58	121	142
40	110	USA-FLORIDA	TAMPA BAY/ST PETERSBERG	27.5N	82.5W	25.6N	84.7W	50	NE	LO	250	N	N	84	286	18:3:17	121	142
40	111	USA-FLORIDA	LAKE OKEECHOBEE	27.0N	80.5W	24.3N	83.8W	80	NE	LO	250	N	N	84	286	18:3:40	121	143
40	112	USA-FLORIDA	KEY WEST/BOCA GRANDE CH	24.5N	82.0W	23.8N	83.4W	10	NE	LO	250	N	N	84	286	18:3:49	121	143
40	113	CUBA	VARADERO/CARDENAS BAY	23.0N	81.5W	23.1N	82.9W	50	E	LO	250	N	N	84	286	18:4:2	121	143
40	114	USA-FLORIDA	SOUTHEAST FLORIDA COAST	26.0N	80.0W	22.1N	82.2W	80	NE	LO	250	N	N	84	286	18:4:20	121	144
41	2	DENMARK	JYLLAND COASTLINE/CLOUDS	55.0N	7.5E	54.6N	10.0E	85	NV	100	N	N	84	283	9:51:1	4	128	
41	3	OMAN	OUT OF FOCUS	18.5N	57.5E	18.5N	59.1E	10	W	LO	100	N	N	84	283	9:51:59	128	114
41	4	OMAN	INTERNAL WAVE PACKETS	17.5N	56.5E	19.2N	59.3E	10	W	LO	100	N	N	84	283	10:4:7	122	144
41	5	OMAN	INTERNAL WAVE PACKETS	17.5N	57.0E	18.7N	59.6E	10	W	LO	100	N	N	84	283	10:4:21	122	144
41	6	OMAN	EDDIES NEAR OMAN COAST	17.6N	60.4E	17.6N	60.4E	0	W	LO	100	N	N	84	283	10:4:42	122	145
41	7	ARABIAN SEA	LAKE CONN/COAST/CLOUDS	54.0N	9.0W	54.0N	9.9W	70	NV	100	N	N	84	283	11:20:27	128	112	
41	8	IRELAND	DUNDALK BAY/IRISH SEA	54.0N	6.0W	53.3N	7.4W	60	E	LO	100	N	N	84	283	11:20:52	128	114
41	9	IRELAND	DUNDALK BAY/ISLE OF MAN	54.5N	5.5W	53.0N	6.1W	30	E	LO	100	N	N	84	283	11:21:5	128	115
41	10	NORTHERN IRELAND	ISLE OF MAN/NORTH CHAN	55.5N	6.5W	51.2N	0.7W	80	NW	HO	100	N	N	84	283	11:22:3	127	119
41	11	NORTHERN IRELAND	THE ALPS/LAKE GENEVA	48.0N	7.0E	47.5N	7.3E	40	NV	100	N	N	84	283	11:23:42	127	126	
41	12	SWITZERLAND	THE ALPS/THUNDER LAKE	48.0N	7.5E	47.2N	7.9E	40	NV	100	N	N	84	283	11:23:50	128	126	
41	13	SWITZERLAND	THE ALPS/THUNDER LAKE	47.0N	8.0E	47.0N	8.1E	30	NV	100	N	N	84	283	11:23:53	126	127	
41	14	SWITZERLAND	THE ALPS/ZURICH	47.0N	8.5E	46.9N	8.4E	30	NV	100	N	N	84	283	11:23:57	126	127	
41	15	SWITZERLAND	THE ALPS/ZURICH	47.5N	8.0E	46.2N	9.7E	50	NW	LO	100	N	N	84	283	11:24:14	128	128
41	16	SWITZERLAND	LAGO DI GARDA	45.5N	10.5E	45.7N	10.4E	10	NV	100	N	N	84	283	11:24:25	128	128	
41	17	ITALY	LIGURIAN SEA EDDIES	44.0N	10.0E	45.1N	11.4E	0	SW	LO	100	N	N	84	283	11:24:39	128	129
41	18	ITALY	PO RIVER SEDIMENT	45.0N	12.5E	44.7N	12.0E	5	NV	100	N	N	84	283	11:24:48	128	130	
41	19	ITALY	GULF OF VENICE	45.5N	13.5E	44.2N	12.8E	1	NV	100	N	N	84	283	11:25:0	128	130	
41	20	YUGOSLAVIA	RIJEKA/ISLANDS	45.0N	14.5E	43.9N	13.2E	1	NV	100	N	N	84	283	11:25:6	128	130	
41	21	YUGOSLAVIA	VELEBIT PLANINA	44.5N	15.0E	43.3N	13.4E	1	NV	100	N	N	84	283	11:25:8	126	131	
41	22	YUGOSLAVIA	TYRRHENIAN SEA	44.5N	15.5E	43.3N	14.2E	10	SW	LO	100	N	N	84	283	11:25:20	128	131
41	23	ITALY	DINARIC ALPS	44.0N	16.0E	42.6N	15.3E	15	NV	100	N	N	84	283	11:25:37	126	132	
41	24	YUGOSLAVIA	DINARIC ALPS	43.5N	16.5E	42.4N	15.4E	5	NV	100	N	N	84	283	11:25:40	126	132	
41	25	YUGOSLAVIA	BARI/TARANTO	41.0N	17.0E	41.5N	16.7E	5	NV	100	N	N	84	283	11:26:0	125	133	
41	26	ITALY	TARANTO	40.5N	17.0E	40.7N	17.7E	15	NV	100	N	N	84	283	11:26:17	125	134	
41	27	ITALY	ROCKY MOUNTAINS	57.0N	130.8W	57.0N	130.8W	50	HO	100	N	N	84	283	17:11:47	128	86	
41	28	CANADA-BC	ROCKY MOUNTAINS	57.0N	130.3W	57.0N	130.3W	50	HO	100	N	N	84	283	17:11:51	128	86	
41	29	CANADA-BC	LAKE ATHABASCA	58.0N	109.0W	55.7N	108.6W	40	N	LO	100	N	N	84	283	17:14:56	128	105
41	30	CANADA-S	LAKE ATHABASCA	58.0N	108.5W	54.8N	104.2W	40	NW	LO	100	N	N	84	283	17:15:37	128	109
41	31	CANADA-S	DEEP BAY/REINDEER LAKE	56.5N	103.0W	54.8N	103.4W	0	N	LO	100	N	N	84	283	17:15:44	128	109
41	32	CANADA-S	PORCUPINE HILLS/LAKES	52.5N	101.5W	54.4N	101.9W	0	N	LO	100	N	N	84	283	17:15:59	128	111
41	33	CANADA-M	LAKE WINNIPEG/LAKES	52.5N	100.5W	52.5N	100.5W	0	N	LO	100	N	N	84	283			69
41	34	CANADA-M	CEDAR LAKE/LAKES	53.0N	98.5W	53.0N	98.5W	0	N	LO	100	N	N	84	283			69
41	35	CANADA-M	LAKE MANITOBA/LAKES	51.5N	98.5W	51.5N	98.5W	5	N	LO	100	N	N	84	283			69
41	36	CANADA-M	SOUTHERN LAKE WINNIPEG	51.0N	97.0W	51.0N	97.0W	10	LO	100	N	N	84	283			69	
41	37	CANADA-M	LK WINNIPEG/LK OF WOODS	50.5N	96.0W	50.5N	96.0W	20	LO	100	N	N	84	283			69	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	LONG	NADIR LAT	LONG	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB	
41	38	CANADA-O	CANADIAN SHIELD LAKES	50.0N	83.5W	52.1N	83.5W	20	S	LO	100	N	N	84	283	17117123	127	117	30	88
41	40	CANADA-O	CANADIAN SHIELD LAKES	49.5N	82.0W	51.7N	82.5W	30	SE	LO	100	N	N	84	283	17117134	127	118	31	88
41	41	USA-NORTH CAROLINA	SPIRAL EDDY FIELD	36.5N	78.0W	41.8N	73.7W	80	SW	HO	100	N	N	84	283	17121148	128	133	41	88
41	42	USA-MARYLAND	SPIRAL EDDY FIELD	38.0N	74.0W	41.3N	73.3W	70	SW	LO	100	N	N	84	283	17121152	128	133	41	88
41	43	USA-DELAWARE	SPIRAL EDDY FIELD	38.5N	74.0W	41.1N	73.0W	70	SW	LO	100	N	N	84	283	17121157	128	133	41	88
41	44	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.5N	73.0W	40.7N	72.6W	80	SW	LO	100	N	N	84	283	171221	128	134	41	88
41	45	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.5N	73.0W	40.7N	72.6W	80	SW	LO	100	N	N	84	283	171221	128	134	41	88
41	46	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.5N	73.0W	40.8N	72.4W	50	SW	LO	100	N	N	84	283	171221	128	134	41	88
41	47	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.5N	73.0W	40.8N	72.2W	50	SW	LO	100	N	N	84	283	171221	128	134	41	88
41	48	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.5N	73.0W	40.2N	72.0W	50	SW	LO	100	N	N	84	283	171221	128	134	42	88
41	49	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.5N	73.0W	40.0N	71.7W	20	SW	LO	100	N	N	84	283	171221	128	134	42	88
41	50	ATLANTIC OCEAN	SPIRAL EDDY FIELD	38.0N	72.5W	38.8N	71.5W	15	SW	LO	100	N	N	84	283	171221	128	134	42	88
41	51	ATLANTIC OCEAN	CLOUDS/DARK	38.0N	72.5W	38.6N	71.2W	15	SW	LO	100	N	N	84	283	171221	128	135	42	88
41	52	ATLANTIC OCEAN	CLOUDS/DARK	37.5N	72.5W	38.7N	70.2W	20	W	LO	100	N	N	84	283	171221	128	135	43	88
41	53	ATLANTIC OCEAN	CLOUDS/DARK	38.0N	73.0W	38.3N	69.7W	30	NW	LO	100	N	N	84	283	171221	128	136	43	88
41	54	BRAZIL	SAD LUIS/CLOUDS	2.58	44.5W	0.7N	42.4W	80	SW	HO	100	N	N	84	283	171341	128	147	45	88
41	55	BRAZIL	PONTA DO MANGUE/CLOUDS	3.08	43.0W	0.9N	42.1W	75	SW	LO	100	N	N	84	283	171341	128	147	45	88
41	56	BRAZIL	CANOCIN/ACARICU/COAST	3.08	40.5W	2.28	40.6W	2	SE	HO	100	N	N	84	283	171351	128	148	43	88
41	57	BRAZIL	CLOUDS/LARGE LAKE	5.48	38.8W	5.48	38.8W	80	HO	100	N	N	N	84	283	171381	128	148	41	88
41	58	BERING SEA	CLOUDS	53.3N	177.5W	53.3N	177.5W	85	HO	100	N	N	N	84	283	181371	128	85	3	70
41	59	USA-ALASKA	ANAKCHAK CRATER	57.0N	156.5W	56.4N	161.7W	50	NE	LO	100	N	N	84	283	181381	128	78	11	70
41	60	USA-ALASKA	ANAKCHAK CRATER	57.0N	156.0W	56.5N	160.9W	40	NE	LO	100	N	N	84	283	181381	128	78	11	70
41	61	USA-ALASKA	ANAKCHAK CRATER	57.0N	157.0W	56.5N	160.2W	20	NE	LO	100	N	N	84	283	181381	128	80	11	70
41	62	USA-ALASKA	MOUNT CHIGINAGAK	57.0N	157.0W	56.6N	159.4W	10	NE	LO	100	N	N	84	283	181381	128	80	12	70
41	63	USA-ALASKA	ANAKCHAK CRATER	57.0N	156.5W	56.6N	155.6W	40	W	LO	100	N	N	84	283	181401	128	84	13	70
41	64	USA-ALASKA	ANAKCHAK CRATER	57.0N	157.0W	56.6N	155.0W	10	W	LO	100	N	N	84	283	181401	128	84	13	70
41	65	USA-ALASKA	MOUNT CHIGINAGAK	57.5N	156.5W	57.0N	154.4W	1	W	LO	100	N	N	84	283	181401	128	85	14	70
41	66	USA-ALASKA	ALASKA PEN/KODIAK ISLAND	57.0N	154.5W	57.1N	148.6W	50	W	LO	100	N	N	84	283	181411	128	85	14	70
41	67	USA-ALASKA	ALASKA PEN/KODIAK ISLAND	57.0N	157.0W	57.1N	147.1W	50	W	LO	100	N	N	84	283	181411	128	81	17	70
41	68	USA-ALASKA	MALASPINA, BERING GLACIER	61.5N	144.0W	56.7N	139.1W	80	NW	HO	100	N	N	84	283	181421	128	88	20	70
41	69	CANADA-BC	LAKES/GLACIERS/CLOUDS	60.0N	134.0W	56.3N	135.7W	50	N	LO	100	N	N	84	283	181431	128	101	22	70
41	70	CANADA-YT	LAKES/GLACIERS/CLOUDS	61.0N	134.0W	55.8N	132.3W	50	NW	HO	100	N	N	84	283	181431	128	104	23	70
41	71	USA-WYOMING	YELLOWSTONE NATL PARK	44.0N	110.0W	48.3N	107.1W	50	SW	LO	100	N	N	84	283	181481	127	125	35	70
41	72	USA-WYOMING	BIG HORN MOUNTAINS	44.0N	107.0W	48.0N	106.5W	15	S	HO	100	N	N	84	283	181481	127	125	35	70
41	73	USA-FLORIDA	CLOUDS	27.0N	80.0W	34.1N	87.8W	80	SE	HO	100	N	N	84	283	181531	128	138	45	70
41	74	USA-FLORIDA	PENSACOLA BAY	30.0N	86.5W	32.5N	86.4W	70	S	HO	100	N	N	84	283	181531	128	138	45	70
41	75	USA-FLORIDA	PENSACOLA & MOBILE BAYS	30.0N	86.0W	32.0N	86.0W	70	SW	LO	100	N	N	84	283	181531	128	140	46	70
41	76	USA-FLORIDA	CAPE CANAVERAL	28.5N	80.5W	31.2N	80.5W	80	SE	HO	100	N	N	84	283	181541	128	140	47	70
41	77	CUBA	WEST END/ISLA JUVENTUD	22.5N	84.0W	25.6N	80.6W	80	SW	HO	100	N	N	84	283	181551	128	142	48	70
41	78	BAHAMAS	HURRICANE JOSEPHINE	21.8N	77.8W	21.8N	77.8W	70	NE	HO	100	N	N	84	283	181571	128	144	48	70
41	79	BAHAMAS	HURRICANE JOSEPHINE	21.6N	77.8W	21.6N	77.8W	70	NE	HO	100	N	N	84	283	181571	128	144	48	70
41	80	BAHAMAS	HURRICANE JOSEPHINE	21.4N	77.8W	21.4N	77.8W	70	NE	HO	100	N	N	84	283	181571	128	144	48	70
41	81		UNEXPOSED	0.68	103.7E	0.68	103.7E													
41	82		UNEXPOSED	0.3N	104.3E	0.3N	104.3E													
41	83	USA-CALIFORNIA	NORTHERN CENTRAL VALLEY	39.0N	122.0W	41.8N	119.4W	10	W	HO	100	N	N	84	283	201181	128	133	40	71
41	84	USA-CALIFORNIA	CENTRAL VALLEY	37.5N	121.0W	37.3N	113.7W	10	W	HO	100	N	N	84	283	201211	128	136	44	71
41	85	USA-CALIFORNIA	SOUTHERN CENTRAL VALLEY	36.5N	120.0W	36.8N	113.0W	10	W	HO	100	N	N	84	283	201211	128	136	44	71
41	86	GALAPAGOS ISLANDS	ISLAND MAKES/PACIFIC OCN	0.58	87.5W	0.0	87.1W	80	SW	HO	100	N	N	84	283	201231	128	147	45	71
41	87	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLOUDS	0.0	90.5W	2.78	86.5W	70	NW	HO	100	N	N	84	283	201231	128	148	44	71
41	88	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	29.08	69.5W	27.48	69.5W	30	S	LO	100	N	N	84	283	201401	128	142	26	71

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	POINT LAT	NADIR LAT	CC%	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB		
41	88	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	29.0S	68.5W	27.8S	69.3W	20	S	L0	100	N	84	283	20:40:51	123	142	25	71	
41	89	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	29.0S	68.0W	28.2S	69.0W	15	NV	100	N	84	283	20:40:59	123	141	25	71		
41	90	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	29.5S	68.0W	28.5S	68.7W	10	SW	L0	100	N	84	283	20:41:5	123	141	25	71	
41	91	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	29.5S	68.0W	28.5S	68.3W	5	SW	L0	100	N	84	283	20:41:15	123	141	24	71	
41	92	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	29.5S	68.0W	28.5S	68.3W	1	W	L0	100	N	84	283	20:41:21	123	141	24	71	
41	93	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	30.0S	68.0W	29.7S	67.8W	1	W	L0	100	N	84	283	20:41:27	123	141	24	71	
41	94	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	30.0S	68.0W	29.7S	67.8W	1	W	L0	100	N	84	283	20:41:34	123	141	23	71	
41	95	ARGENTINA	ANDES MOUNTAINS/VOLCANOS	30.5S	68.0W	30.1S	67.4W	1	W	L0	100	N	84	283	20:41:34	123	141	23	71	
41	96	ARGENTINA	SAN LUIS/MERCEDES	33.0S	65.5W	32.8S	65.0W	2		NV	100	N	84	283	20:42:27	124	139	21	71	
41	97	ARGENTINA	AGRICULTURE/MARSH	34.2S	63.7W	34.2S	63.7W	1	NV	100	N	84	283	20:42:54	124	138	20	71		
41	98	ARGENTINA	SIERRA DE CURA MALAL	38.0S	62.0W	36.8S	61.2W	1	SW	L0	100	N	84	283	20:43:42	124	137	17	71	
41	99	ARGENTINA	BAHIA BLANCA	39.0S	62.5W	37.5S	60.3W	30	SW	L0	100	N	84	283	20:44:0	125	136	16	71	
41	100	ATLANTIC OCEAN	EDDIES NEAR ARGENTINA	41.5S	55.5W	41.5S	55.5W	20	SW	L0	100	N	84	283	20:45:23	125	133	12	71	
41	101	ATLANTIC OCEAN	EDDIES NEAR ARGENTINA	41.7S	55.2W	41.7S	55.2W	30	SW	L0	100	N	84	283	20:45:28	125	133	12	71	
41	102	KOMANDORSKIYE ISLANDS	MEDNY ISLAND/BERING SEA	55.0N	167.5E	54.4N	167.7E	10	NE	L0	100	N	84	283	23:11:47	128	111	26	73	
41	103	USSR	KAFIRNIGAN RIVER	38.0N	68.0E	37.2N	65.5E	0	NE	L0	100	N	84	284	8:12:46	125	136	44	79	
41	104	AFGHANISTAN	HINDU KUSH MOUNTAINS	37.0N	70.0E	36.4N	66.3E	0	N	HO	100	N	84	284	8:13:03	125	137	45	79	
41	105	AFGHANISTAN	HINDU KUSH MOUNTAINS	35.8N	67.0E	35.8N	67.0E	30	HO	100	N	84	284	8:13:15	125	137	45	79		
41	106	PAKISTAN	TARBELA DAM	34.0N	73.0E	33.0N	69.7E	40	NE	L0	100	N	84	284	8:14:10	124	139	47	79	
41	107	INDIA	INDUS RIVER/HIMALAYAS	28.0N	81.0E	27.5N	74.4E	40	NE	HO	100	N	84	284	8:15:55	124	142	49	79	
41	108	ATLANTIC OCEAN	CLOUD GYRE	56.8N	23.2W	56.8N	23.2W	80		L0	100	N	84	284	9:29:40	128	82	11	80	
41	109	ATLANTIC OCEAN	CLOUD GYRE	56.8N	22.4W	56.8N	22.4W	80		L0	100	N	84	284	9:29:47	128	83	11	80	
41	110	ATLANTIC OCEAN	CLOUD GYRE	56.9N	20.9W	56.9N	20.9W	80		L0	100	N	84	284	9:30:0	128	84	12	80	
41	111	ENGLAND	YORKSHIRE MOORS	54.0N	0.5W	56.0N	0.6E	30	SW	L0	100	N	84	284	9:33:3	128	103	21	80	
42	2	MEXICO	COASTLINE/GULF OF MEXICO	23.0N	98.0W	25.0N	99.9W	80	SW	HO	50	N	84	281	20:59:0	121	143	41	39	
42	3	MEXICO	SHUTTLE/GULF OF MEXICO	22.5N	98.0W	18.1N	95.0W	80	NE	HO	50	N	84	281	21:1:6	120	145	41	39	
42	4	MEXICO	GULF OF TEHUANTEPEC	16.0N	96.0W	15.6N	93.4W	70	NE	HO	50	N	84	281	21:1:51	120	145	40	39	
42	5	MEXICO	GULF OF TEHUANTEPEC	15.5N	94.5W	15.1N	93.1W	70	NE	L0	50	N	84	281	21:2:0	120	145	40	39	
42	6	HONDURAS	GULFO DE FONSECA	13.5N	87.0W	11.2N	90.7W	70	NE	HO	50	N	84	281	21:3:8	120	146	39	38	
42	7	NICARAGUA	LAGO DE NICARAGUA/SHOKE	11.5N	85.0W	9.9N	89.9W	60	NE	HO	50	N	84	281	21:3:32	120	146	38	38	
42	8	PERU	ICA/ICA RIVER VALLEY	14.0S	76.0W	14.0S	75.9W	15	NV	50	N	84	281	21:10:35	120	145	25	39		
42	9	PERU	ICA RIVER MOUTH	15.0S	76.0W	17.2S	73.9W	85	NW	L0	50	N	84	281	21:11:31	120	145	23	39	
42	10	PERU	COASTLINE/CLOUDS	15.0S	76.0W	20.1S	72.0W	80	NW	HO	50	N	84	281	21:12:24	120	144	21	39	
42	11	ARGENTINA	LAVA FLOWS/SALARS/CLOUDS	26.5S	67.5W	26.5S	67.3W	70		NV	50	U	Y	84	281	21:14:21	121	142	16	39
42	12	ARGENTINA	LAVA FLOWS/SALARS/CLOUDS	26.5S	67.5W	26.7S	67.2W	70		NV	50	U	Y	84	281	21:14:25	121	142	16	39
42	13	ARGENTINA	LAVA FLOWS/SALARS/CLOUDS	26.5S	67.5W	27.1S	66.9W	60		NV	50	U	Y	84	281	21:14:32	121	142	16	39
42	14	ARGENTINA	LAVA FLOWS/SALARS/CLOUDS	26.5S	67.5W	27.4S	66.7W	0		NV	50	U	Y	84	281	21:14:37	121	142	15	39
42	15	ARGENTINA	MAR DEL PLATA/COASTLINE	38.0S	58.0W	37.7S	57.1W	0		NV	50	N	84	281	21:17:58	123	136	7	39	
42	16	ARGENTINA	INTERNAL WAVES	39.5S	59.0W	40.1S	54.2W	0	W	L0	50	N	84	281	21:18:48	124	134	4	39	
42	17	ATLANTIC OCEAN	INTERNAL WAVES	39.5S	58.5W	40.4S	53.9W	0	SW	L0	50	N	84	281	21:18:54	124	134	4	39	
42	18	ATLANTIC OCEAN	INTERNAL WAVES	39.0S	58.5W	43.3S	50.1W	1	SW	L0	50	N	84	281	21:19:56	124	131	1	39	
42	19	ATLANTIC OCEAN	INTERNAL WAVES	39.0S	58.5W	43.9S	49.2W	1	SW	L0	50	N	84	281	21:20:9	124	131	1	39	
42	20	PACIFIC OCEAN	CLOUDS AND WATER	31.1S	86.1W	31.1S	86.1W	95		HO	50	N	84	281	22:44:44	122	140	13	40	
42	21	MONGOLIA	HANGAYN MOUNTAIN	47.0N	102.0E	46.4N	101.0E	0		NV	50	U	Y	84	281	23:34:33	126	52	1	41
42	22	MONGOLIA	HANGAYN MOUNTAIN	47.0N	102.0E	46.6N	101.3E	0		NV	50	U	Y	84	281	23:34:38	126	52	1	41
42	23	SWEDEN	KATTEGAT	59.0N	12.0E	57.0N	6.2E	40	NE	HO	50	N	84	282	8:34:58	128	86	18	47	
42	24	NORWAY	KATTEGAT AND SKAGERAK	61.0N	10.0E	57.1N	9.6E	70	NE	HO	50	N	84	282	8:35:26	128	86	19	47	
42	25	SWEDEN	OLAND/BALTIC SEA	57.0N	17.0E	56.8N	17.8E	80	W	L0	50	N	84	282	8:36:35	127	96	22	47	
42	26	SWEDEN	SHUTTLE OVER BALTIC SEA	56.6N	20.8E	56.6N	20.8E	90		HO	50	N	84	282	8:37:1	127	98	23	47	
42	27	USSR	BARSAKEL MES SALT FLAT	44.0N	59.0E	44.0N	59.8E	60		NV	50	N	84	282	8:44:3	125	130	38	47	
42	28	USSR	AMUDARYA RIVER/ARAL SEA	44.0N	60.0E	43.7N	60.3E	60		NV	50	N	84	282	8:44:8	125	131	38	47	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	NADIR LAT	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB			
42	29	USSR	BLACK SEA/DNEPR R MOUTH	48.0N	32.5E	48.0N	34.1E	20	W	L	O	50	N	84 282	10:12:12	125	128	37	48	
42	30	USSR	KERCHENSKIY STRAIT	45.0N	36.5E	45.2N	36.4E	30	W	L	O	50	N	84 282	10:12:30	125	128	37	48	
42	31	TURKEY	YASUN POINT/BLACK SEA	41.5N	37.5E	42.8N	38.9E	10	SW	L	O	50	N	84 282	10:13:23	125	132	39	48	
42	32	TURKEY	MOUNT ARARAT/LAKE VAN	38.5N	44.0E	38.3N	43.5E	1	NV	50			N	84 282	10:14:39	124	135	41	48	
42	33	TURKEY	MOUNT ARARAT/LAKE VAN	38.5N	44.5E	38.0N	43.8E	1	NV	50			N	84 282	10:14:48	124	135	41	48	
42	34	TURKEY	LAKE VAN	39.0N	43.0E	38.6N	44.3E	0	NV	50			N	84 282	10:14:54	124	135	41	48	
42	35	IRAN	ZAGROS MOUNTAINS	35.0N	48.5E	35.6N	47.6E	0	NV	50			N	84 282	10:15:58	123	138	42	48	
42	36	IRAN	ZAGROS MOUNTAINS	35.0N	47.0E	35.3N	47.9E	1	NV	50			N	84 282	10:16:11	123	138	42	48	
42	37	IRAN	ZAGROS MOUNTAINS	34.5N	47.0E	34.9N	48.3E	2	NV	50			N	84 282	10:16:11	123	138	42	48	
42	38	IRAN	ZAGROS MTS/PERSIAN GULF	26.5N	53.5E	27.5N	54.9E	20	SW	L	O	50	N	84 282	10:18:31	122	142	44	48	
42	39	IRAN	COAST/CLOUDS/GULF OF OMAN	25.0N	59.0E	24.5N	57.1E	50	L	O	50		N	84 282	10:18:28	121	143	44	48	
42	40	GREENLAND	KONG FREDERIK VI KYST	60.5N	40.0W	57.1N	36.4W	75	NW	H	O	50	N	84 282	11:33:11	8	127	88	19	48
42	41	SWITZERLAND	THE ALPS	47.0N	9.0E	47.2N	8.4E	40	NV	50			N	84 282	11:40:38	125	128	38	48	
42	42	SWITZERLAND	THE ALPS	47.0N	10.0E	46.8N	10.0E	30	NV	50			N	84 282	11:40:47	125	127	38	48	
42	43	ITALY	THE ALPS	46.5N	10.5E	46.6N	10.7E	20	NV	50			N	84 282	11:40:58	125	127	37	48	
42	44	ITALY	THE ALPS	46.0N	11.0E	46.1N	11.3E	20	NV	50			N	84 282	11:41:11	125	128	37	48	
42	45	ITALY	PD R MOUTH/GULF OF VENICE	45.0N	12.0E	45.6N	12.2E	30	NV	50			N	84 282	11:41:17	125	129	37	48	
42	46	ITALY	PD R MOUTH/GULF OF VENICE	45.0N	12.5E	45.3N	12.6E	30	NV	50			N	84 282	11:41:23	125	129	37	48	
42	47	GREECE	INTERNAL WAVES	38.0N	21.0E	38.6N	21.7E	20	SW	L	O	50	N	84 282	11:43:49	123	135	41	49	
42	48	GREECE	INTERNAL WAVES	37.5N	21.0E	38.4N	22.0E	20	SW	L	O	50	N	84 282	11:43:54	123	136	41	49	
42	49	GREECE	PELOPONNIBOS/ATHENS	38.0N	22.5E	38.0N	22.4E	1	NV	50			N	84 282	11:44:11	123	138	41	49	
42	50	GREECE	PELOPONNIBOS/ATHENS	37.5N	22.0E	37.8N	22.8E	1	NV	50			N	84 282	11:44:11	123	138	41	49	
42	51	GREECE	PELOPONNIBOS/ATHENS	37.5N	23.0E	37.8N	22.8E	0	NV	50			N	84 282	11:44:11	123	138	41	49	
42	52	GREECE	PELOPONNIBOS/ATHENS	38.5N	23.0E	37.0N	23.5E	5	NV	50			N	84 282	11:44:21	123	137	42	49	
42	53	LIBYA	SPIRAL EDDY FIELD	33.5N	24.0E	34.8N	25.8E	0	SW	L	O	50	N	84 282	11:45:11	123	138	42	49	
42	54	LIBYA	SPIRAL EDDY FIELD	33.5N	24.0E	34.6N	26.0E	0	SW	L	O	50	N	84 282	11:45:11	123	138	42	49	
42	55	LIBYA	SPIRAL EDDY FIELD	33.5N	24.0E	34.3N	26.3E	0	SW	L	O	50	N	84 282	11:45:11	123	138	42	49	
42	56	LIBYA	SPIRAL EDDY FIELD	34.0N	24.0E	33.8N	26.8E	0	SW	L	O	50	N	84 282	11:45:11	123	138	42	49	
42	57	LIBYA	MEDITERRANEAN SEA STRUCT	32.0N	28.5E	33.4N	27.2E	0	SW	L	O	50	N	84 282	11:45:34	122	139	43	49	
42	58	EGYPT	NILE RIVER DELTA	31.5N	30.0E	31.1N	29.2E	0	E	L	O	50	N	84 282	11:46:17	122	140	43	49	
42	59	EGYPT	NILE RIVER DELTA	31.0N	30.5E	30.5N	29.8E	0	E	L	O	50	N	84 282	11:46:30	122	140	43	49	
42	60	EGYPT	RED SEA/GULF OF SUEZ	28.0N	33.0E	27.5N	32.2E	0	NE	L	O	50	N	84 282	11:47:26	121	142	44	49	
42	61	EGYPT	LIBYAN & ARABIAN DESERTS	24.0N	33.5E	25.0N	34.2E	0	SW	L	O	50	N	84 282	11:48:13	121	143	44	49	
42	62	SUDAN	NUBIAN DESERT/JABAL IB	21.0N	36.0E	23.2N	36.2E	0	SW	L	O	50	N	84 282	11:48:46	121	143	44	49	
42	63	SUDAN	NUBIAN DESERT/JABAL IB	21.5N	36.0E	22.2N	36.2E	0	E	L	O	50	N	84 282	11:48:46	121	144	44	49	
42	64	SUDAN	NUBIAN DESERT DUST STORM	20.0N	35.0E	20.4N	37.4E	1	W	H	O	50	N	84 282	11:49:38	120	144	44	49	
42	65	SUDAN	NUBIAN DESERT DUST STORM	20.0N	35.5E	20.1N	37.6E	1	W	H	O	50	N	84 282	11:49:41	120	144	44	49	
42	66	SUDAN	NUBIAN DESERT DUST STORM	18.0N	34.5E	18.4N	36.8E	2	W	H	O	50	N	84 282	11:50:13	120	145	44	49	
42	67	SUDAN	NUBIAN DESERT DUST STORM	18.0N	36.0E	17.2N	38.5E	1	NW	H	O	50	N	84 282	11:50:33	120	145	44	49	
42	68	ETHIOPIA	MITSINA TO NUBIAN DESERT	16.0N	38.0E	16.4N	40.1E	10	NW	L	O	50	N	84 282	11:50:48	120	145	43	49	
42	69	ETHIOPIA	ETHIOPIAN HIGHLANDS	14.5N	39.0E	15.0N	41.0E	15	W	L	O	50	N	84 282	11:51:14	120	145	43	49	
42	70	ETHIOPIA	AFAR DEPRESSION	14.0N	40.5E	13.2N	42.1E	10	W	H	O	50	N	84 282	11:51:48	120	146	42	49	
42	71	ETHIOPIA	AFAR DEPRESSION	12.5N	41.0E	12.4N	42.9E	15	W	L	O	50	N	84 282	11:51:59	120	146	42	49	
42	72	ETHIOPIA	AFAR DEPRESSION	11.0N	41.0E	11.7N	43.0E	20	W	L	O	50	N	84 282	11:52:11	120	146	42	49	
42	73	ETHIOPIA	AFAR DEPRESSION	10.5N	41.5E	11.4N	43.2E	20	SW	L	O	50	N	84 282	11:52:18	120	146	42	49	
42	74	DJIBOUTI	AFAR DEPRESSION	11.5N	42.5E	9.9N	44.1E	15	NW	H	O	50	N	84 282	11:52:44	119	146	41	49	
42	75	ETHIOPIA	AFAR DEPRESSION	10.0N	43.0E	9.1N	44.9E	20	NW	H	O	50	N	84 282	11:52:58	118	146	41	49	
42	76	SPAIN	NW COAST/ATLANTIC EDDIES	43.0N	11.0W	45.2N	9.7W	60	SW	L	O	50	N	84 282	13:10:20	128	129	37	50	
42	77	SPAIN	NW COAST/ATLANTIC EDDIES	43.0N	9.0W	44.6N	8.6W	1	SW	L	O	50	N	84 282	13:10:34	128	130	38	50	
42	78	SPAIN	STRAIT OF GIBRALTAR	36.0N	5.0W	40.8N	3.5W	1	SW	H	O	50	N	84 282	13:11:57	125	134	40	50	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE ORB
42	79	SPAIN	STRAIT OF GIBRALTAR	36.0N 6.5W	38.7N 2.1W	1 SW HO 50	N N 84 282	13:12:21	125	135 41 50
42	80	SPAIN	STRAIT OF GIBRALTAR	36.0N 4.0W	39.3N 1.6W	1 SW HO 50	N N 84 282	13:12:29	125	135 41 50
42	81	SPAIN	GIBRALTAR/MEDITER EDDIES	36.5N 3.5W	38.5N 0.6W	1 SW HO 50	N N 84 282	13:12:46	125	135 41 50
42	82	MOROCCO	GIBRALTAR/MEDITER EDDIES	35.0N 3.5W	37.4N 0.6E	1 SW HO 50	N N 84 282	13:13: 9	124	136 42 50
42	83	MOROCCO	SAHARAN ATLAS MOUNTAINS	33.0N 6.0W	33.8N 4.2E	15 W HO 50	N N 84 282	13:14:21	124	139 43 50
42	84	CANADA-O	CLOUDS/SUNGLINT	56.8N 88.1W	58.8N 88.1W	75 HO 50	N N 84 282	14:30: 5	128	82 16 51
42	85		SIR-B ANTENNA		14.2S 13.1E		N N 84 282	14:57:43	121	145 29 51
42	86		SIR-B ANTENNA		16.1S 14.2E		N N 84 282	14:58:16	121	145 28 51
42	87	REPUBLIC SOUTH AFRICA	VERY DARK	34.0S 22.5E	27.8S 22.5E	30 S HO 50	N N 84 282	15: 1:50	123	142 19 51
42	88		SIR-B ANTENNA		28.5S 23.1E		N N 84 282	15: 2: 3	123	141 18 51
42	89	CANADA-Q	MANICOUAGAN RESERVOIR	51.5N 69.0W	51.5N 67.9W	70 NV 50	N Y 84 282	16: 5:30	127	119 32 52
42	90	CANADA-Q	MANICOUAGAN RESERVOIR	51.5N 69.0W	51.3N 67.3W	70 NV 50	N Y 84 282	16: 5:36	127	119 32 52
42	91	CANADA-Q	SEPT-ILES	50.5N 67.0W	50.8N 66.2W	60 NV 50	N Y 84 282	16: 5:49	127	120 33 52
42	92	CANADA-Q	SEPT-ILES	50.5N 66.5W	50.6N 65.6W	60 NV 50	N Y 84 282	16: 5:56	127	121 33 52
42	93	CANADA-Q	ANTICOSTI ISLAND	49.5N 64.0W	49.6N 63.3W	50 NV 50	N N 84 282	16: 6:23	127	122 34 52
42	94	CANADA-Q	ANTICOSTI ISLAND	48.5N 63.0W	48.2N 62.4W	60 NV 50	N N 84 282	16: 6:34	126	123 34 52
42	95	CANADA-N	NOTRE DAME BAY	50.0N 55.0W	46.4N 55.9W	75 HO 50	N N 84 282	16: 7:45	128	127 37 52
42	96	ATLANTIC OCEAN	EDDIES	43.2N 51.8W	43.2N 51.8W	60 HO 50	N N 84 282	16: 8:59	125	131 39 52
42	97	ATLANTIC OCEAN	EDDIES	41.5N 49.4W	41.5N 49.4W	70 HO 50	N N 84 282	16: 9:37	125	133 40 52
42	98		SIR-B ANTENNA		12.7S 10.4W		N N 84 282	16:26:12	121	146 31 52
42	99	CANADA-O	LAKE SUPERIOR SUNGLINT	48.5N 88.0W	50.0N 86.7W	80 SW LO 50	N N 84 282	17:35:10	127	122 34 53
42	100	CANADA-O	LAKE SUPERIOR SUNGLINT	48.0N 86.0W	48.8N 86.2W	80 S LO 50	N N 84 282	17:35:15	127	122 34 53
42	101		SIR-B ANTENNA FOLDING		32.8S 18.3W		N N 84 282	18: 1:19	124	139 15 53
42	102		SIR-B ANTENNA FOLDING		33.1S 18.0W		N N 84 282	18: 1:25	124	139 15 53
42	103	BRAZIL	AMAZON RIVER/RIO PURUS	4.8S 60.3W	4.8S 60.3W	60 NW LO 50	N N 84 282	19:21:46	121	146 36 54
42	104	BRAZIL	AMAZON RIVER	5.0S 60.1W	5.0S 60.1W	60 NW LO 50	N N 84 282	19:21:50	121	146 36 54
42	105	BRAZIL	RIO MADEIRA/RIO ARIPIUANA	5.4S 59.9W	5.4S 59.9W	40 NW LO 50	N N 84 282	19:21:57	121	146 36 54
42	106	BRAZIL	RIO MADEIRA	6.0S 59.6W	6.0S 59.6W	70 NW LO 50	N N 84 282	19:22: 7	121	146 36 54
42	107	PACIFIC OCEAN	NORTH PACIFIC CYCLONE	52.9N 138.8W	52.9N 138.8W	95 HO 50	N Y 84 282	20:31:36	127	115 30 55
42	108	PACIFIC OCEAN	NORTH PACIFIC CYCLONE	52.5N 138.6W	52.5N 138.6W	95 HO 50	N Y 84 282	20:31:49	127	116 31 55
42	109	PACIFIC OCEAN	NORTH PACIFIC CYCLONE	52.1N 137.5W	52.1N 137.5W	95 HO 50	N Y 84 282	20:32: 0	127	117 31 55
42	110	USA-CALIFORNIA	CENTRAL VALLEY	38.0N 122.0W	42.9N 119.2W	50 SW HO 50	N N 84 282	20:35:56	126	132 39 55
42	111	USA-NEVADA	SIERRA NEVADA MTS/LAKES	40.0N 119.5W	42.3N 118.3W	30 SW LO 50	N N 84 282	20:36:10	125	132 40 55
42	112	USA-CALIFORNIA	GREAT BASIN TO CA COAST	37.0N 121.0W	39.3N 114.5W	30 SW HO 50	N N 84 282	20:37:14	125	135 41 55
42	113	USA-CALIFORNIA	GREAT BASIN TO CA COAST	36.5N 118.5W	38.5N 114.0W	30 SW HO 50	N N 84 282	20:37:23	125	135 41 55
42	114	USA-CALIFORNIA	GREAT BASIN TO CA COAST	35.0N 117.5W	37.0N 111.9W	30 SW HO 50	N N 84 282	20:38: 2	125	137 42 55
42	115	MEXICO	SIERRA MADRE OCCIDENTAL	29.5N 109.0W	31.7N 106.8W	30 SW LO 50	N N 84 282	20:39:45	124	140 44 55
42	116	MEXICO	SIERRA MADRE OCCIDENTAL	28.0N 108.0W	31.1N 106.2W	30 SW LO 50	N N 84 282	20:39:56	124	140 44 55
42	117	MEXICO	SIERRA MADRE OCCIDENTAL	28.5N 108.5W	30.8N 106.0W	30 SW LO 50	N N 84 282	20:40: 2	124	140 44 55
42	118	MEXICO	SIERRA MADRE OCCIDENTAL	22.7N 99.6W	22.7N 99.6W	50 LO 50	N N 84 282	20:42:33	122	143 45 55
42	119	MEXICO	SIERRA MADRE ORIENTAL	22.5N 99.4W	22.5N 99.4W	40 LO 50	N N 84 282	20:42:38	122	143 45 55
42	120	MEXICO	SIERRA MADRE ORIENTAL	22.2N 98.2W	22.2N 98.2W	40 LO 50	N N 84 282	20:42:43	122	144 45 55
43	2	CANADA-NWT	BELCHER ISLANDS	56.5N 79.5W	54.2N 79.9W	25 N LO 250	N Y 84 284	15:30:11	125	111 25 84
43	3	CANADA-NWT	BELCHER ISLANDS	56.0N 79.5W	54.1N 79.5W	20 N LO 250	N Y 84 284	15:30:15	125	112 25 84
43	4	CANADA-NWT	BELCHER ISLANDS	56.5N 79.0W	54.0N 78.2W	2 N LO 250	N Y 84 284	15:30:22	125	112 26 84
43	5	CANADA-NWT	BELCHER ISLANDS	56.0N 78.0W	53.9N 78.8W	10 N LO 250	N Y 84 284	15:30:27	125	113 26 84
43	6	CANADA-NWT	BELCHER ISLANDS	56.0N 78.5W	53.8N 78.3W	10 NW LO 250	N N 84 284	15:30:43	125	114 27 84
43	7	CANADA-NWT	BELCHER ISLANDS	56.0N 79.5W	53.4N 76.7W	25 NW LO 250	N N 84 284	15:30:52	125	115 27 84
43	8	CANADA-NWT	BELCHER ISLANDS	56.0N 79.5W	53.1N 75.8W	40 NW LO 250	N N 84 284	15:33:40	124	126 35 84
43	9	CANADA-NS	NORTHUMBERLAND STRAIT	46.0N 64.0W	47.2N 61.4W	50 SW LO 250	N N 84 284	15:33:40	124	126 35 84

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S	DATE	GMT	ALT	NADIR AZI ELE ORB		
43	10	CANADA-NS	COBEQUID BAY	45.5N 63.5W	46.8N 60.8W	50 SW	LO	250	N	84 284	15:33:50 124	127 36 84	
43	11	CANADA-NS	BAY OF FUNDY	44.5N 65.5W	46.5N 60.1W	60 SW	LO	250	N	84 284	15:33:57 124	127 36 84	
43	12	CANADA-NS	NORTHUMBERLAND STRAIT	48.0N 64.0W	45.7N 58.6W	75 W	LO	250	N	84 284	15:34:18 124	128 37 84	
43	13	USA-ALASKA	BERING GLACIER	80.5N 143.0W	58.0N 143.7N	30 N	LO	250	N	84 284	18:53:1 7	128 76 85	
43	14	USA-ALASKA	BERING GLACIER	80.5N 142.5W	58.1N 143.1W	30 N	LO	250	N	84 284	18:53:12 128	77 6 85	
43	15	USA-ALASKA	MALASPINA GLACIER	80.0N 141.0W	58.2N 142.2W	50 N	LO	250	N	84 284	18:53:20 128	77 6 85	
43	16	USA-ALASKA	MALASPINA GLACIER	80.0N 140.5W	58.3N 141.3W	50 N	LO	250	N	84 284	18:53:28 128	77 7 85	
43	17	NORTH AMERICA	CLOUDS	50.6N 91.2W	50.6N 91.2W	95	HO	250	N	84 284	17:1 4	125 121 31 85	
43	18	CANADA-O	MANITOULIN ISLAND	48.0N 83.0W	47.7N 84.8W	30 SE	LO	250	N	84 284	17:1 2:23 124	128 36 85	
43	19	CANADA-O	MANITOULIN ISLAND	48.0N 82.5W	47.5N 84.4W	70 SE	LO	250	N	84 284	17:1 2:28 124	128 36 85	
43	20	CAYMAN ISLANDS	GRAND CAYMAN/SPIRAL EDDY	19.5N 80.0W	21.1N 78.8W	5 SW	LO	250	N	84 284	18:40:13 121	144 53 86	
43	21	GALAPAGOS ISLANDS	ISLA SAN SALVADOR/WAKES	0.0	91.0W	0.7N	LO	250	N	84 284	20:15:10 120	147 51 87	
43	22	GALAPAGOS ISLANDS	ISLA SAN SALVADOR	0.0	91.0W	0.1E	LO	250	N	84 284	20:15:25 120	147 50 87	
43	23	GALAPAGOS ISLANDS	ISLA ISABELA	0.0	91.0W	1.4E	LO	250	N	84 284	20:15:48 120	147 50 87	
43	24	ARGENTINA	ANDES MOUNTAINS	30.5S 70.0W	30.1S 68.8W	0	NV	250	N	84 284	20:15:48 120	141 28 87	
43	25	ARGENTINA	ANDES MOUNTAINS	30.5S 70.0W	30.3S 68.7W	0	NV	250	N	84 284	20:15:48 120	141 28 87	
43	26	ARGENTINA	ANDES MOUNTAINS	31.0S 69.5W	30.5S 68.5W	0	NV	250	N	84 284	20:15:48 120	140 28 87	
43	27	ARGENTINA	ANDES MOUNTAINS	31.0S 69.5W	30.7S 68.3W	0	NV	250	N	84 284	20:15:48 120	140 28 87	
43	28	ARGENTINA	ANDES MOUNTAINS	31.5S 69.5W	31.0S 68.1W	0	NV	250	N	84 284	20:15:48 120	140 28 87	
43	29	ARGENTINA	PAMPAS	32.1S 67.1W	32.1S 67.1W	0	NV	250	N	84 284	20:15:48 120	140 28 87	
43	30	ARGENTINA	PAMPAS	32.4S 66.8W	32.4S 66.8W	0	NV	250	N	84 284	20:15:48 120	139 28 87	
43	31	CHILE	ARCHIPELAGO LOS CHONOS	45.0S 75.0W	45.1S 74.2W	15	NV	250	N	84 284	21:58:128 125	129 12 88	
43	32	SOUTH AMERICA	VERY DARK	46.9S 71.2W	46.8S 71.2W	0	NV	250	N	84 284	21:58:11 125	127 10 88	
43	33	SOUTH AMERICA	VERY DARK	47.6S 69.8W	47.6S 69.8W	0	NV	250	N	84 284	21:58:28 128	126 9 88	
43	34	SOUTH AMERICA	VERY DARK	51.7S 80.8W	51.7S 80.8W	0	NV	250	N	84 284	22:1 120 127	118 3 88	
43	35	AUSTRALIA-WA	SOUTHWESTERN TIP	34.0S 115.5W	34.5S 114.5E	30	NV	250	N	84 285	8:17:1 124	138 26 95	
43	36	PERSIAN GULF	BURNING OIL RIGS	28.3N 49.0E	28.3N 49.0E	2	N	NV	250	N	84 285	9:28:41 122	141 51 98
43	37	IRAN	JAZIREH-YE KHARK	29.5N 50.5E	28.6N 48.6E	15	NV	250	N	84 285	9:28:53 122	141 51 98	
43	38	BAHRAIN	GULF OF BAHRAIN	28.0N 50.5E	28.7N 51.1E	0	NV	250	N	84 285	9:27:30 121	142 52 98	
43	39	QATAR	PERSIAN GULF SURFACE STR	25.5N 52.0E	25.5N 52.0E	0	NV	250	N	84 285	9:27:52 121	142 53 98	
43	40	CHAGOS ARCHIPELAGO	DIEGO GARCIA	7.5S 72.5E	7.1S 72.2E	80	NV	250	N	84 285	9:37:33 120	148 50 98	
43	41	CHAGOS ARCHIPELAGO	DIEGO GARCIA	7.5S 72.5E	7.1S 72.2E	80	NV	250	N	84 285	9:37:42 120	148 50 98	
43	42	ATLANTIC OCEAN	CLOUDS	57.1N 38.4W	57.1N 38.4W	80	HO	250	N	84 285	10:48:1 3	128 89 11 97	
43	43	ATLANTIC OCEAN	CLOUDS	57.1N 38.4W	57.1N 38.4W	80	HO	250	N	84 285	10:48:13 128	89 12 97	
43	44	ATLANTIC OCEAN	CLOUDS	57.1N 38.4W	57.1N 38.4W	80	HO	250	N	84 285	10:48:13 128	89 12 97	
43	45	ISLES OF SCILLY	CELTIC SEA	48.5N 8.5W	48.5N 8.5W	30 SE	LO	250	N	84 285	10:48:25 128	81 12 97	
43	46	ISLES OF SCILLY	CELTIC SEA	48.5N 8.5W	48.5N 8.5W	30 SE	LO	250	N	84 285	10:48:38 125	115 26 97	
43	47	ENGLAND	ENGLISH CHAN/LIZZARD PT	50.0N 5.0W	50.0N 5.0W	30 SE	LO	250	N	84 285	10:48:48 125	118 27 97	
43	48	ENGLAND	ISLE OF WIGHT	50.5N 1.0W	50.4N 1.0W	2	NV	250	N	84 285	10:48:58 125	117 27 97	
43	49	ENGLAND	RIVER THAMES	51.5N 0.5E	49.8N 0.4W	2 NE	LO	250	N	84 285	10:47:55 125	122 31 97	
43	50	ENGLAND	STRAIT OF DOVER SHIPPING	51.0N 1.5E	48.7N 0.1W	0 NE	LO	250	N	84 285	10:48:11 125	122 31 97	
43	51	FRANCE	STRAIT OF DOVER	51.0N 1.5E	48.8N 0.2E	5 NE	LO	250	N	84 285	10:48:18 125	123 32 97	
43	52	ENGLAND	LONDON	51.0N 0.0	49.1N 1.2E	5 N	LO	250	N	84 285	10:48:32 124	135 43 87	
43	53	SICILY	MOUNT ETNA	38.0N 15.0E	38.7N 16.2E	75 SW	LO	250	N	84 285	10:52:10 123	135 43 87	
43	54	SICILY	MOUNT ETNA	37.5N 15.0E	38.5N 16.4E	80 SW	LO	250	N	84 285	10:52:14 123	135 43 87	
43	55	SICILY	MOUNT ETNA	37.5N 15.0E	38.5N 16.4E	80 SW	LO	250	N	84 285	10:52:18 123	135 43 87	
43	56	MEDITERRANEAN SEA	WATER	36.8N 20.5E	36.8N 20.5E	5	NV	250	N	84 285	10:53:28 122	137 48 87	
43	57	MEDITERRANEAN SEA	EDDIES	34.0N 22.2E	34.0N 22.2E	0	NV	250	N	84 285	10:54:13 122	138 48 87	
43	58	LIBYA	MEDITERRANEAN SEA	33.5N 22.7E	33.5N 22.7E	0	NV	250	N	84 285	10:54:13 122	138 48 87	
43	59	EGYPT	LAKE NASSER	22.5N 32.0E	22.4N 31.7E	0	NV	250	N	84 285	10:57:42 121	143 54 97	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT		NADIR		CC%	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR					
				LAT	LONG	LAT	LONG										AZI	ELE ORB				
43	80	EGYPT	LAKE NASSER	22.5N	31.5E	22.2N	31.9E	0	NV	250	N	Y	84	285	10:57:46	121	144	54 97				
43	81	SUDAN	LAKE NASSER	22.0N	31.5E	21.8N	32.1E	0	NV	250	N	Y	84	285	10:57:53	121	144	55 97				
43	82	SEYCHELLES	FAROUKH GROUP	10.0S	51.0E	10.3S	51.5E	20	NV	250	N	Y	84	285	11:7:24	120	146	48 97				
43	83	MASCARENE ISLANDS	REUNION	21.0S	55.5E	18.6S	56.7E	40	SW	L0	250	N	84	285	11:9:52	121	144	42 97				
43	84	MASCARENE ISLANDS	REUNION	21.0S	55.5E	19.9S	57.5E	50	SW	L0	250	N	84	285	11:10:14	121	144	41 97				
43	85	MASCARENE ISLANDS	REUNION	21.5S	54.5E	21.5S	58.6E	25	W	L0	250	N	84	285	11:10:43	121	144	40 97				
43	86	MASCARENE ISLANDS	REUNION	21.0S	55.5E	22.8S	59.5E	35	NW	L0	250	N	84	285	11:11:7	122	143	38 97				
43	87		BLANK			7.0N	117.8W							84	286	21:6:41	120	146	63 120			
43	88	PACIFIC OCEAN	CLOUDS & WATER	18.6S	102.5W	18.6S	102.5W	50						250	N	84	286	21:14:16	121	144	50 120	
43	89	PACIFIC OCEAN	CLOUDS & WATER	19.0S	102.3W	19.0S	102.3W	40						250	N	84	286	21:14:23	121	144	49 120	
43	90	PACIFIC OCEAN	CLOUDS & WATER	19.9S	101.7W	19.9S	101.7W	70						H0	250	N	84	286	21:14:39	121	144	49 120
43	91	SOUTH AMERICA	CLOUDS	48.1S	71.6W	48.1S	71.6W	90						250	N	84	286	21:24:8	125	125	17 120	
43	92	FALKLAND ISLANDS	CLOUDS	51.4S	63.9W	51.4S	63.9W	90						250	N	84	286	21:25:40	126	119	11 120	
43	93	FALKLAND ISLANDS	CLOUDS	52.6S	60.3W	52.6S	60.3W	90						250	N	84	286	21:26:19	126	116	9 120	
43	94	USSR	DZHUGDZHUR MOUNTAINS	55.5N	136.5E	57.1N	138.5E	25		NV	100	N	Y	84	286	22:15:19	126	89	7 121			
43	95	USSR	DZHUGDZHUR MOUNTAINS	56.5N	138.0E	57.1N	139.2E	35		NV	100	N	Y	84	286	22:15:25	126	90	7 121			
43	96	USSR	DZHUGDZHUR MOUNTAINS	57.0N	138.5E	57.1N	139.7E	30		NV	100	N	Y	84	286	22:15:29	126	90	7 121			
43	97	USSR	DZHUGDZHUR MOUNTAINS	57.0N	139.0E	57.1N	140.2E	30		NV	100	N	Y	84	286	22:15:33	126	90	7 121			
43	98	USSR	DZHUGDZHUR MOUNTAINS	57.5N	139.5E	57.1N	141.2E	30		NV	100	N	Y	84	286	22:15:41	126	91	8 121			
43	99	USSR	URLINSKIY MOUNTAINS	58.5N	141.0E	57.1N	142.0E	25		NV	100	N	Y	84	286	22:15:48	126	92	8 121			
43	80		CARGO BAY, RMS			48.4S	93.5W							100	N	84	286	22:53:9	128	125	16 121	
43	81	USSR	LENA RIVER	58.5N	114.5E	57.1N	115.4E	20	NW	L0	100	N	84	286	23:44:7	126	88	6 122				
43	82	USSR	GORA LONGDOR	59.0N	116.0E	57.1N	116.8E	20	NW	L0	100	N	Y	84	286	23:44:19	126	90	7 122			
43	83	USSR	GORA LONGDOR	59.0N	116.5E	57.1N	117.5E	25	NW	L0	100	N	Y	84	286	23:44:25	126	90	7 122			
43	84	USSR	CHARA/KALARSKIY MTS	57.0N	118.5E	57.1N	118.9E	10		NV	100	N	Y	84	286	23:44:37	126	91	8 122			
43	85	USSR	CHARA/KALARSKIY MTS	57.0N	119.0E	57.1N	119.5E	10		NV	100	N	Y	84	286	23:44:42	126	92	8 122			
43	86	USSR	CHARA/KALARSKIY MTS	57.0N	120.0E	57.0N	120.9E	2		NV	100	N	Y	84	286	23:44:53	126	93	9 122			
43	87	USSR	KALARSKIY MOUNTAINS	57.0N	120.5E	57.0N	121.3E	2		NV	100	N	Y	84	286	23:44:57	126	94	9 122			
43	88	USSR	STANDOVY MOUNTAINS	57.0N	121.0E	57.0N	121.8E	5		NV	100	N	Y	84	286	23:45:1	126	94	9 122			
43	89	USSR	STANDOVY MOUNTAINS	57.0N	121.5E	57.0N	122.3E	10		NV	100	N	Y	84	286	23:45:5	126	94	10 122			
43	90	USSR	STANDOVY MOUNTAINS	57.0N	122.0E	56.9N	122.8E	20		NV	100	N	Y	84	286	23:45:9	126	95	10 122			
43	91	USSR	SUTANO-GONANSKIY MTS	56.5N	126.5E	56.7N	125.9E	30		NV	100	N	84	286	23:45:36	126	98	11 122				
43	92	USSR	LAKE BOL'SHOYE TOKO	56.0N	131.0E	56.4N	129.5E	25		NV	100	N	84	286	23:46:7	126	101	13 122				
43	93	USSR	UDSKAYA BAY	54.5N	135.5E	55.7N	134.6E	10		NV	100	N	84	286	23:46:52	126	105	16 122				
43	94	USSR	UDSKAYA BAY	54.5N	137.0E	55.6N	135.3E	20		NV	100	N	84	286	23:46:58	125	108	16 122				
43	95	USSR	UDSKAYA BAY	55.0N	136.5E	55.1N	137.9E	30		NV	100	N	84	286	23:47:22	125	108	18 122				
43	96	EAST GERMANY	BALTIC SEA	54.0N	12.0E	52.2N	13.4E	60	N	L0	100	N	84	287	8:42:28	125	117	23 128				
43	97	EAST GERMANY	BALTIC SEA	54.0N	12.5E	52.1N	13.8E	40	N	L0	100	N	84	287	8:42:32	125	117	24 128				
43	98	EAST GERMANY	BALTIC SEA	54.0N	13.5E	52.0N	14.1E	40	N	L0	100	N	84	287	8:42:36	125	118	24 128				
43	99	POLAND	BALTIC SEA	53.5N	14.5E	51.8N	14.5E	45	N	L0	100	N	84	287	8:42:40	125	118	24 128				
43	100	POLAND	SZCZECIN/GORZOW	53.0N	15.0E	51.6N	15.2E	45	N	L0	100	N	84	287	8:42:47	125	118	25 128				
43	101	EAST GERMANY	BALTIC SEA	54.0N	12.0E	49.2N	21.0E	80	NW	H0	100	N	84	287	8:43:55	125	123	29 128				
43	102	USSR	MUKACHEVO	48.5N	22.5E	48.2N	23.1E	75		NV	100	N	84	287	8:44:21	124	125	30 128				
43	103	TURKEY	BOSPORUS/BLACK SEA	41.0N	29.0E	43.8N	30.6E	50	SW	L0	100	N	84	287	8:46:6	124	131	36 128				
43	104	TURKEY	BLACK SEA COASTLINE	41.0N	31.0E	43.3N	31.4E	40	S	L0	100	N	84	287	8:46:17	124	131	37 128				
43	105	TURKEY	BLACK SEA COASTLINE	42.0N	32.5E	42.2N	32.9E	35		NV	100	N	84	287	8:46:41	123	132	38 128				
43	106	TURKEY	BLACK SEA COASTLINE	41.5N	36.0E	40.9N	34.7E	2		NV	100	N	84	287	8:47:11	123	134	40 128				
43	107	IRAQ	TIGRIS RIVER	37.0N	44.0E	35.0N	41.9E	10	NE	H0	100	N	84	287	8:49:10	122	138	47 128				
43	108	IRAQ	TIGRIS RIVER	32.0N	46.5E	30.3N	45.6E	60	NE	L0	100	N	84	287	8:50:41	122	140	51 128				
44	2	DOMINICAN REPUBLIC	GOLFE DE LA GONAVE/CLDS	20.0N	72.0W	15.3N	77.6W							H0	250	N	84	286	18:6:50	120	145	61 118

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S DATE	GMT	ALT	NADIR AZI ELE ORB
44	3	VENEZUELA	PENINSULA PARAGUANA	12.0N 70.0W	11.3N 75.2W	50 NE LO 250 N N 84 288 181 81 1 120		148	82 118
44	4	COLOMBIA	RIO META/CANO LA HERMOSEA	5.8N 70.5W	4.8N 71.3W	50 NV 250 N N 84 288 181 81 1 120		148	82 118
44	5	BRAZIL	CLOUDS	1.28 67.8W	1.28 67.8W	80 250 N N 84 288 181 11 42 119		147	81 118
44	6	BRAZIL	CLOUDS	1.58 67.7W	1.58 67.7W	100 250 N Y 84 288 181 11 47 119		147	80 118
44	7	BRAZIL	CLOUDS	2.88 67.1W	2.88 67.1W	88 250 N Y 84 288 181 12 1 119		148	80 118
44	8	BRAZIL	CLOUDS	2.88 67.0W	2.88 67.0W	85 250 N Y 84 288 181 12 10 119		148	80 118
44	9	BRAZIL	AGRICULTURE	9.48 68.1W	9.48 68.1W	20 NV 250 N N 84 288 181 14 1 120		148	58 118
44	10	BRAZIL	AGRICULTURE	10.18 68.7W	10.18 68.7W	15 NV 250 N N 84 288 181 14 18 120		148	58 118
44	11	BRAZIL	RIO PARAGUAY	20.08 68.0W	20.08 68.0W	20 W LO 250 N N 84 288 181 17 24 121		144	47 118
44	12	BRAZIL	AG/FIRE NE OF PONTA PORA	22.08 68.5W	21.48 68.5W	0 S LO 250 N N 84 288 181 17 40 121		144	47 118
44	13	BRAZIL	RIO PARANA/RIO PIQUIN	24.08 64.5W	23.18 64.3W	0 S LO 250 N Y 84 288 181 18 11 121		143	45 118
44	14	BRAZIL	RIO PARANA/RIO PIQUIN	24.08 64.5W	23.78 63.8W	0 W LO 250 N Y 84 288 181 18 23 121		143	44 118
44	15	BRAZIL	RIO IGUAZU/RIO JORDAO	26.08 52.0W	25.48 52.6W	40 SW LO 250 N N 84 288 181 18 55 122		142	43 118
44	16	BRAZIL	AGRICULTURE	27.58 50.9W	27.58 50.8W	20 LO 250 N N 84 288 181 19 34 122		142	41 118
44	17	USA-NEVADA	PYRAMID LAKE	40.0N 118.5W	40.0N 120.9W	40 E LO 250 N N 84 288 181 27 55 123		134	42 119
44	18	USA-CALIFORNIA	MONTENEY BAY	37.0N 122.0W	39.4N 120.2W	50 SW LO 250 N N 84 288 181 28 1 123		135	42 119
44	19	USA-CALIFORNIA	MONO LAKE/SIERRA NEVADA	38.0N 118.0W	39.1N 118.8W	0 SW LO 250 N N 84 288 181 28 13 123		135	43 119
44	20	USA-CALIFORNIA	TUOLUMNE R/SIERRA NEVADA	38.0N 118.0W	38.8N 118.5W	0 NV 250 F N 84 288 181 28 19 123		135	43 119
44	21	USA-CALIFORNIA	DIABLO RANGE/FIRES	38.0N 117.0W	38.2N 118.8W	5 SW LO 250 N N 84 288 181 28 31 123		138	44 119
44	22	USA-CALIFORNIA	EDWARDS AFB	35.0N 118.0W	35.8N 116.2W	0 SW LO 250 F Y 84 288 181 29 20 122		137	48 119
44	23	USA-CALIFORNIA	EDWARDS AFB	35.0N 118.0W	35.4N 115.8W	0 SW LO 250 F Y 84 288 181 29 28 122		138	47 119
44	24	USA-CALIFORNIA	SOUTHERN CALIFORNIA	34.0N 117.0W	34.6N 116.0W	0 SW LO 250 N Y 84 288 181 29 44 122		138	47 119
44	25	USA-CALIFORNIA	SOUTHERN CALIFORNIA	33.5N 117.0W	34.3N 114.7W	1 SW LO 250 N Y 84 288 181 29 50 122		138	48 119
44	26	USA-CALIFORNIA	SOUTHERN CALIFORNIA	33.5N 117.0W	34.0N 114.4W	3 SW LO 250 N Y 84 288 181 29 55 122		138	48 119
44	27	USA-CALIFORNIA	SAN DIEGO	33.0N 117.0W	33.7N 114.2W	5 SW LO 250 N Y 84 288 181 30 1 122		138	48 119
44	28	USA-CALIFORNIA	SAN DIEGO	33.0N 116.5W	33.5N 113.9W	5 SW LO 250 N Y 84 288 181 30 1 122		138	48 119
44	29	MEXICO	LAGUNA SALADA	32.0N 115.5W	33.0N 113.4W	1 SW LO 250 N N 84 288 181 30 18 122		139	48 119
44	30	MEXICO	RIO COLORADO MOUTH	32.0N 115.0W	32.5N 113.0W	1 SW LO 250 N N 84 288 181 30 24 122		139	49 119
44	31	MEXICO	BAHIA DE AJUAR	31.5N 114.0W	31.4N 112.0W	30 W LO 250 F N 84 288 181 30 48 122		140	50 119
44	32	MEXICO	RIO COLORADO MOUTH	31.5N 114.5W	30.8N 111.5W	15 NW LO 250 F N 84 288 181 30 58 122		140	51 119
44	33	MEXICO	PUNTA TEPOCA	29.5N 112.5W	29.8N 110.4W	20 W LO 250 N N 84 288 181 31 21 121		141	52 119
44	34	MEXICO	RIO PAPAGAYO SEDIMENT	17.0N 100.0W	16.5N 100.3W	1 N LO 250 N N 84 288 181 35 39 120		145	61 119
44	35	MEXICO	RIO PAPAGAYO SEDIMENT	16.5N 100.0W	14.2N 99.8W	2 N LO 250 N N 84 288 181 35 1 120		145	61 119
44	36	MEXICO	RIO VOLTEPEC SEDIMENT	18.0N 98.0W	18.1N 98.5W	20 N LO 250 N N 84 288 181 35 121 120		146	82 119
44	37	GALAPAGOS ISLANDS	ISLA FERNADINA/INT WAVES	0.58 81.5W	0.18 81.1W	2 NV 250 N N 84 288 181 40 15 120		147	81 119
44	38	CHILE	ANDES/RIO HURTADO	30.58 70.5W	29.18 72.2W	15 SE LO 250 N N 84 288 181 45 57 122		141	38 119
44	39	ARGENTINA	ANDES/RIO COSTANO VTEJO	30.58 70.0W	29.68 71.8W	20 SE LO 250 N N 84 288 181 45 1 122		141	38 119
44	40	CHILE	LOS VILOS/RIO CHOAPA	32.08 71.5W	30.48 71.2W	1 S LO 250 N N 84 288 181 45 21 122		140	38 119
44	41	CHILE	ANDES/EAST OF SANTIAGO	33.58 70.0W	31.88 68.8W	0 SW LO 250 N Y 84 288 181 49 48 123		140	37 119
44	42	CHILE	ANDES/EAST OF SANTIAGO	34.08 70.0W	32.18 68.7W	0 SW LO 250 N Y 84 288 181 49 53 123		140	38 119
44	43	ARGENTINA	RIO TUNUYAN	33.58 68.0W	32.68 68.2W	0 S LO 250 F N 84 288 181 50 1 123		138	38 119
44	44	CHILE	SANTIAGO/ANDES MOUNTAINS	33.58 70.0W	33.28 68.7W	0 W LO 250 N N 84 288 181 50 14 123		138	35 119
44	45	ARGENTINA	DUNE FIELD	35.08 68.0W	35.38 68.6W	0 W LO 250 U N 84 288 181 50 56 123		138	33 118
44	46	ARGENTINA	BAHIA BLANCA/PUNTA ALTA	39.08 62.0W	38.38 63.4W	20 W LO 250 N N 84 288 181 51 56 124		136	29 118
44	47	ATLANTIC OCEAN	CLOUDS OVER S ATLANTIC	42.38 58.4W	42.38 58.4W	50 LO 250 F Y 84 288 181 53 22 124		132	24 118
44	48	ATLANTIC OCEAN	CLOUDS OVER S ATLANTIC	42.48 58.3W	42.48 58.3W	50 LO 250 F Y 84 288 181 53 24 125		132	24 118
44	49	ATLANTIC OCEAN	CLOUDS OVER S ATLANTIC	42.78 57.8W	42.78 57.8W	40 LO 250 F Y 84 288 181 53 28 125		132	24 118
44	50	ATLANTIC OCEAN	CLOUDS OVER S ATLANTIC	42.88 57.8W	42.88 57.8W	40 LO 250 F Y 84 288 181 53 32 125		132	24 118
44	51	ATLANTIC OCEAN	CLOUDS OVER S ATLANTIC	43.08 57.8W	43.08 57.8W	80 LO 250 F Y 84 288 181 53 38 125		132	24 118
44	52	ATLANTIC OCEAN	CLOUDS OVER S ATLANTIC	43.28 57.1W	43.28 57.1W	30 LO 250 F N 84 288 181 53 42 125		131	23 118

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S DATE	GMT	ALT	NADIR AZI ELE ORB
44	53	ATLANTIC OCEAN	VERY DARK	45.8S 53.2W	45.8S 53.2W	0 LO 250 U N 84 286	19:54:40	125	128 20 119
44	54	ATLANTIC OCEAN	VERY DARK	46.1S 52.6W	46.1S 52.6W	0 LO 250 U N 84 286	19:54:48	125	128 19 119
44	55		ORBITAL REFUELING SYSTEM	13.2N 121.5W	13.2N 121.5W	250 N N 84 286	21:5:13	126	146 62 120
44	56		SIR-B ANTENNA LATCH	10.3N 119.7W	10.3N 119.7W	250 N N 84 286	21:5:13	126	146 63 120
44	57	ARGENTINA	CLOUDS & LAKES	50.2S 67.0W	50.2S 67.0W	60 LO 250 F N 84 286	21:25:26	126	121 13 120
44	58	ARGENTINA	CLOUDS & LAKES	50.3S 66.7W	50.3S 66.7W	70 LO 250 N N 84 286	21:25:29	126	121 13 120
44	59	FALKLAND ISLANDS	FALKLAND SOUND/CLOUDS	51.5S 59.5W	52.0S 62.2W	90 NE LO 250 F Y 84 286	21:26:20	126	118 10 120
44	60	FALKLAND ISLANDS	FALKLAND SOUND/CLOUDS	51.5S 59.5W	52.1S 61.8W	90 NE LO 250 F Y 84 286	21:26:24	126	117 10 120
44	61	FALKLAND ISLANDS	FALKLAND SOUND	51.5S 59.0W	52.2S 61.5W	85 NE LO 250 F Y 84 286	21:26:27	126	117 10 120
44	62	FALKLAND ISLANDS	CAPE DOLPHIN	51.5S 59.0W	52.3S 61.2W	85 NE LO 250 F Y 84 286	21:26:30	126	117 9 120
44	63	FALKLAND ISLANDS	CAPE DOLPHIN	51.5S 59.0W	52.6S 60.4W	80 NE LO 250 N Y 84 286	21:26:39	126	116 9 120
44	64	FALKLAND ISLANDS	N COAST OF EAST FALKLAND	51.5S 58.5W	52.7S 60.0W	80 NE LO 250 N N 84 286	21:26:43	126	116 9 120
44	65	FALKLAND ISLANDS	SEA LION ISLANDS	52.5S 59.0W	53.0S 59.0W	70 N LO 250 U N 84 286	21:26:53	126	115 8 120
44	66		RMS/TAI	48.2S 97.5W	48.2S 97.5W	100 U N 84 286	22:52:37	125	128 20 121
44	67		RMS/TAI	48.0S 94.2W	48.0S 94.2W	100 U N 84 286	22:53:37	126	125 17 121
44	68		ISLAND IN NORTH PACIFIC	16.5N 169.5W	15.5N 169.1W	20 NW LO 100 F N 84 287	0:2:18	120	145 62 122
44	69	JOHNSTON ATOLL	EAGLE IS/THREE BROTHERS	6.0S 71.5E	6.9S 69.5E	40 NW LO 100 N N 84 287	9:2:11	120	146 61 128
44	70	CHAGOS ARCHIPELAGO	THE ALPS	46.5N 8.5E	47.2N 2.4E	0 SE LO 100 N N 84 287	10:14:0	124	126 32 129
44	71	SWITZERLAND	THE ALPS	46.0N 8.0E	46.8N 3.2E	0 SE LO 100 N N 84 287	10:14:11	124	127 32 129
44	72	ITALY							
44	73	SWITZERLAND	THE ALPS	46.5N 9.5E	46.5N 3.7E	0 E LO 100 N Y 84 287	10:14:17	124	127 33 129
44	74	SWITZERLAND	THE ALPS	46.5N 9.0E	46.3N 4.0E	0 E LO 100 N Y 84 287	10:14:22	124	128 33 129
44	75	SWITZERLAND	THE ALPS	46.5N 9.5E	46.0N 4.6E	20 NE LO 100 N Y 84 287	10:14:29	124	128 33 129
44	76	ITALY	THE ALPS	46.0N 9.5E	45.8N 5.0E	20 E LO 100 N Y 84 287	10:14:35	124	128 34 129
44	77	ITALY	THE ALPS	46.0N 10.0E	45.6N 5.3E	30 NE LO 100 F Y 84 287	10:14:40	124	129 34 129
44	78	SWITZERLAND	THE ALPS	46.5N 9.0E	45.0N 6.3E	0 NE LO 100 N N 84 287	10:14:54	124	129 35 129
44	79	ITALY	NICE/DARK	44.0N 7.5E	43.8N 8.1E	1 E LO 250 U N 84 287	10:15:20	124	131 36 129
44	80	ITALY	GROSSETO	43.0N 11.0E	42.6N 9.8E	15 NE LO 250 F N 84 287	10:15:47	123	132 38 129
44	81	ITALY	LAGO DI BRACCIANO	42.0N 12.0E	42.1N 10.5E	0 E LO 250 F Y 84 287	10:15:58	123	132 38 129
44	82	ITALY	LAGO DI BRACCIANO	42.0N 12.0E	41.9N 10.8E	0 E LO 250 F Y 84 287	10:16:0	123	133 39 129
44	83	ITALY	VESUVIUS/ISOLA DI ISCHIA	41.0N 14.0E	40.9N 12.1E	5 E LO 250 N Y 84 287	10:16:24	123	134 40 129
44	84	ITALY	VESUVIUS/ISOLA DI ISCHIA	41.0N 14.0E	40.8N 12.3E	20 E LO 250 N Y 84 287	10:16:27	123	134 40 129
44	85	ITALY	VESUVIUS/ISOLA DI ISCHIA	41.0N 14.5E	40.6N 12.5E	20 E LO 250 N Y 84 287	10:16:31	123	134 40 129
44	86	ITALY	VESUVIUS/ISOLA DI ISCHIA	40.5N 14.5E	40.4N 12.7E	15 E LO 250 N Y 84 287	10:16:35	123	134 41 129
44	87	ITALY	VESUVIUS/ISOLA DI ISCHIA	40.5N 14.5E	40.2N 12.9E	15 E LO 250 N Y 84 287	10:16:38	123	134 41 129
44	88	ITALY	VESUVIUS/ISOLA DI ISCHIA	40.5N 14.5E	40.0N 13.2E	15 NE LO 250 N Y 84 287	10:16:42	123	134 41 129
44	89	ITALY	VESUVIUS/ISOLA DI ISCHIA	40.5N 14.5E	39.9N 13.4E	10 NE LO 250 N Y 84 287	10:16:46	123	134 41 129
44	90	ITALY	GULFO DI POLICASTRO	40.0N 15.5E	39.4N 13.9E	50 NE LO 250 F Y 84 287	10:16:55	123	135 42 129
44	91	ITALY	GULFO DI POLICASTRO	40.0N 16.0E	39.2N 14.1E	50 NE LO 250 F Y 84 287	10:16:59	123	135 42 129
44	92	ITALY	BELVEDERE MARITIMO	39.5N 16.0E	39.0N 14.4E	40 NE LO 250 F N 84 287	10:17:0	123	135 42 129
44	93	ITALY	STRAIT OF MESSINA	38.0N 15.5E	38.5N 15.0E	50 SE LO 250 N N 84 287	10:17:14	123	135 43 129
44	94	ITALY	STRAIT OF MESSINA	38.5N 15.5E	38.3N 15.2E	60 NV 250 N N 84 287	10:17:18	123	136 43 129
44	95	ITALY	SOUTHERN TIP	38.0N 16.0E	37.5N 16.1E	50 N LO 250 N N 84 287	10:17:35	123	136 44 129
44	96	LIBYA	AL BAYDA/NEW CITY	33.0N 21.5E	33.0N 20.7E	0 E LO 250 N N 84 287	10:19:0	122	139 48 129
44	97	LIBYA	DARNAH/MARTUBAH AIRFIELD	23.5N 22.5E	23.3N 21.3E	0 E LO 250 N N 84 287	10:19:18	122	139 48 129
44	98	LIBYA	JAGHUB/BIRAL ARASHIYAH	28.5N 25.0E	28.7N 23.6E	0 E LO 250 N N 84 287	10:20:0	122	141 52 129
44	99	SUDAN	NILE RIVER	21.0N 30.5E	21.5N 29.8E	0 SE LO 250 N N 84 287	10:22:39	121	144 59 129
44	100	ETHIOPIA	TANA LAKE	12.0N 37.0E	13.9N 34.8E	0 SE LO 250 N N 84 287	10:24:56	120	145 63 129
44	101	ETHIOPIA	ETHIOPIAN HIGHLANDS	9.0N 38.0E	9.8N 37.2E	1 N LO 250 N Y 84 287	10:26:0	120	146 65 129
44	102	ETHIOPIA	ETHIOPIAN HIGHLANDS	9.0N 38.0E	9.6N 37.4E	1 N LO 250 N Y 84 287	10:26:12	120	146 65 129

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE DRB
44	103	ETHIOPIA	ETHIOPIAN HIGHLANDS	8.5N 38.0E	8.8N 37.8E	O E	LO 250 N Y 84 287	10:28:24	120	148 85 129
44	104	ETHIOPIA	ETHIOPIAN HIGHLANDS	8.5N 38.0E	8.7N 37.8E	O E	LO 250 N Y 84 287	10:28:27	120	148 85 129
44	105	ETHIOPIA	ETHIOPIAN HIGHLANDS	8.5N 38.0E	8.7N 37.8E	O E	LO 250 N Y 84 287	10:28:30	120	148 85 129
44	106	ETHIOPIA	ETHIOPIAN HIGHLANDS	8.5N 38.0E	8.7N 37.8E	O E	LO 250 N Y 84 287	10:28:33	120	148 85 129
44	107	MADAGASCAR	DAWA RIVER	4.5N 40.5E	5.0N 40.1E	80	NV 250 N Y 84 287	10:27:30	120	148 85 129
44	108	MADAGASCAR	DAWA RIVER	4.5N 40.5E	5.0N 40.1E	80	NV 250 N Y 84 287	10:27:33	120	148 85 129
44	109	MADAGASCAR	NE COASTLINE	13.0S 50.0E	10.2S 48.0E	30 SE	LO 250 N Y 84 287	10:32:12	120	148 85 129
44	110	MADAGASCAR	NE COASTLINE	13.0S 50.0E	10.2S 48.0E	30 SE	LO 250 N Y 84 287	10:32:15	120	148 85 129
44	111	MADAGASCAR	CAPE D'AMBRE	13.0S 50.0E	10.2S 48.0E	30 SE	LO 250 N Y 84 287	10:32:18	120	148 85 129
44	112	MADAGASCAR	CAPE D'AMBRE	13.0S 50.0E	10.2S 48.0E	30 SE	LO 250 N Y 84 287	10:32:21	120	148 85 129
45	2	CANADA-PEI	WESTERN PRINCE EDWARD I	48.5N 84.0W	48.4N 82.5W	60 W	LO 100 N N 84 288	14:58:32	124	188 34 118
45	3	CANADA-NS	SABLE ISLAND	48.5N 84.0W	48.4N 82.5W	60 W	LO 100 N N 84 288	14:58:35	124	188 34 118
45	4	PACIFIC OCEAN	OCCLUDED LOW	58.7N 138.7W	58.7N 138.7W	100	HO 100 N N 84 288	16:18:34	128	81 3 117
45	5	PACIFIC OCEAN	OCCLUDED LOW	58.8N 138.3W	58.8N 138.3W	100	HO 100 N N 84 288	16:18:37	128	81 3 117
45	6	PACIFIC OCEAN	OCCLUDED LOW	58.8N 138.3W	58.8N 138.3W	100	HO 100 N N 84 288	16:18:40	128	81 3 117
45	7	PACIFIC OCEAN	OCCLUDED LOW	58.8N 138.3W	58.8N 138.3W	100	HO 100 N N 84 288	16:18:43	128	81 3 117
45	8	PACIFIC OCEAN	OCCLUDED LOW	58.8N 138.3W	58.8N 138.3W	100	HO 100 N N 84 288	16:18:46	128	81 3 117
45	9	PACIFIC OCEAN	OCCLUDED LOW	58.8N 138.3W	58.8N 138.3W	100	HO 100 N N 84 288	16:18:49	128	81 3 117
45	10	PACIFIC OCEAN	OCCLUDED LOW	58.8N 138.3W	58.8N 138.3W	100	HO 100 N N 84 288	16:18:52	128	81 3 117
45	11	CANADA-BC	ST ELIAS MOUNTAINS	60.0N 137.0W	60.0N 137.0W	20 NW	LO 100 N Y 84 288	16:19:00	128	88 6 117
45	12	CANADA-BC	ST ELIAS MOUNTAINS	60.0N 137.0W	60.0N 137.0W	20 NW	LO 100 N Y 84 288	16:19:03	128	88 6 117
45	13	CANADA-BC	ST ELIAS MOUNTAINS	60.0N 137.0W	60.0N 137.0W	20 NW	LO 100 N Y 84 288	16:19:06	128	88 6 117
45	14	CANADA-BC	ST ELIAS MOUNTAINS	60.0N 137.0W	60.0N 137.0W	20 NW	LO 100 N Y 84 288	16:19:09	128	88 6 117
45	15	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:11	128	88 12 117
45	16	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:14	128	88 12 117
45	17	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:17	128	88 12 117
45	18	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:20	128	88 12 117
45	19	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:23	128	88 12 117
45	20	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:26	128	88 12 117
45	21	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:29	128	88 12 117
45	22	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:32	128	88 12 117
45	23	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:35	128	88 12 117
45	24	CANADA-BC	CANADIAN ROCKIES	58.5N 128.0W	57.1N 128.0W	20 NE	LO 100 N Y 84 288	16:20:38	128	88 12 117
45	25	USA-MICHIGAN	UPPER PEN/F08 FLOWS	48.5N 85.0W	48.5N 85.0W	30	NV 100 U N 84 288	16:27:21	124	127 34 117
45	26	USA-NEW YORK	BUFFALO/F08 FLOWS	43.0N 78.0W	43.7N 80.7W	50 SE	LO 100 U N 84 288	16:27:24	124	131 37 117
45	27	CANADA-O	TORONTO	43.5N 78.5W	43.7N 80.7W	50 SE	LO 100 U N 84 288	16:27:27	124	131 37 117
45	28	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	41.0N 77.0W	41.0N 77.0W	50	NV 100 U N 84 288	16:28:12	123	131 38 117
45	29	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	41.0N 77.0W	41.0N 77.0W	50	NV 100 U N 84 288	16:28:15	123	131 38 117
45	30	USA-DIST OF COLUMBIA	WASHINGTON DC/BALTIMORE	38.0N 77.0W	38.0N 77.0W	20 SE	LO 100 U N 84 288	16:28:18	123	132 39 117
45	31	USA-PENNSYLVANIA	APPALACHIAN MOUNTAINS	42.0N 76.5W	42.0N 76.5W	30 SE	LO 100 U N 84 288	16:28:21	123	132 39 117
45	32	USA-MARYLAND	BALTIMORE/SUBUEHANNA H	39.0N 76.0W	40.2N 78.0W	30 N	LO 100 U N 84 288	16:28:24	123	133 40 117
45	33	USA-PENNSYLVANIA	PHILADELPHIA/DELAWARE R	40.0N 75.5W	40.1N 75.5W	30	NV 100 N N 84 288	16:28:27	123	134 41 117
45	34	USA-MARYLAND	BALTIMORE/SUSQUEHANNA R	39.0N 76.0W	39.5N 75.1W	40 W	LO 100 N N 84 288	16:28:30	123	134 41 117
45	35	ATLANTIC OCEAN	THE EYE OF JOSEPHINE	40.0N 71.0W	39.5N 71.1W	95	LO 100 N N 84 288	16:31:12	122	137 48 117
45	36	BERMUDA ISLANDS	ISLANDS/NORTH ATLANTIC	32.0N 65.0W	31.5N 65.1W	30 NE	LO 100 N N 84 288	16:32:17	122	140 50 117
45	37	ATLANTIC OCEAN	CLOUDS & WATER	29.0N 65.1W	29.3N 65.1W	80	NV 100 N Y 84 288	16:33:19	121	141 52 117
45	38	ATLANTIC OCEAN	CLOUDS AND WATER	28.0N 64.8W	28.0N 64.8W	80	NV 100 N Y 84 288	16:33:24	121	141 52 117
45	39	ATLANTIC OCEAN	CLOUDS AND WATER	28.0N 64.8W	28.0N 64.8W	80	NV 100 N Y 84 288	16:33:29	121	141 53 117
45	40	ATLANTIC OCEAN	CLOUDS AND WATER	28.0N 64.8W	28.0N 64.8W	80	NV 100 N Y 84 288	16:33:34	121	141 53 117
45	41		UNDEREXPOSED	50.3N 115.8W	50.3N 115.8W	80	HO 100 N N 84 288	17:15:57	124	130 38 118
45	42	CANADA-A	MOON/EARTH/ORBITER	45.0N 105.0W	44.7N 104.6W	1	NV 100 N Y 84 288	17:15:57	124	130 38 118
45	43	USA-WYOMING	BLACK HILLS	44.5N 104.6W	44.4N 104.4W	2	NV 100 N Y 84 288	17:15:57	124	130 38 118
45	44	USA-WYOMING	BLACK HILLS	44.5N 104.6W	44.4N 104.4W	2	NV 100 N Y 84 288	17:15:57	124	130 38 118

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	CENTER POINT LON	NADIR LAT	NADIR LON	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB
45	45	USA-WYOMING	BLACK HILLS	44.5N	104.5W	44.2N	104.1W	2	NV	100	N	Y	84	286	17:57:8	124	130	37	118
45	46	USA-SOUTH DAKOTA	BLACK HILLS/RAPID CITY	44.0N	103.5W	43.9N	103.6W	2	NV	100	N	Y	84	286	17:57:15	124	131	37	118
45	47	USA-SOUTH DAKOTA	BLACK HILLS/RAPID CITY	44.0N	103.5W	43.6N	103.1W	2	NV	100	N	Y	84	286	17:57:22	123	131	38	118
45	48	USA-NEBRASKA	THE SAND HILLS	42.5N	102.0W	42.7N	101.8W	20	NV	100	N	Y	84	286	17:57:41	123	132	39	118
45	49	USA-NEBRASKA	THE SAND HILLS	42.5N	102.0W	42.4N	101.5W	15	NV	100	N	Y	84	286	17:57:48	123	132	39	118
45	50	USA-NEBRASKA	THE SAND HILLS	42.0N	101.5W	42.1N	101.1W	5	NV	100	N	Y	84	286	17:57:54	123	132	39	118
45	51	USA-NEBRASKA	THE SAND HILLS	42.0N	101.5W	41.8N	100.6W	1	NV	100	N	Y	84	286	17:58:2	123	133	40	118
45	52	USA-NEBRASKA	THE SAND HILLS/PLATTE R	41.5N	101.0W	41.5N	100.3W	5	NV	100	N	Y	84	286	17:58:7	123	133	40	118
45	53	USA-LOUISIANA	MISSISSIPPI RIVER	31.5N	81.5W	33.2N	81.1W	60	S	100	N	N	84	286	18:0:57	122	139	49	118
45	54	USA-MISSISSIPPI	CHANDOLEUR SOUND/GLINT	30.5N	88.5W	30.6N	88.0W	50	NV	100	N	N	84	286	18:1:42	122	140	51	118
45	55	USA-LOUISIANA	MISSISSIPPI DELTA/GLINT	30.0N	88.5W	30.8N	88.7W	40	NV	100	N	N	84	286	18:1:47	122	140	51	118
45	56	USA-LOUISIANA	MISSISSIPPI DELTA/GLINT	29.5N	90.0W	30.3N	88.5W	40	SW	100	N	N	84	286	18:1:52	121	140	51	118
45	57	USA-FLORIDA	CUMULUS FORMATION	28.5N	80.5W	28.8N	85.5W	80	NE	100	N	N	84	286	18:2:58	121	142	54	118
45	58	USA-FLORIDA	CUMULUS FORMATION	28.5N	80.5W	28.5N	85.4W	80	NE	100	N	N	84	286	18:3:4	121	142	54	118
45	59	USA-FLORIDA	CUMULUS FORMATION	28.0N	83.0W	28.3N	85.2W	70	NE	100	N	N	84	286	18:3:8	121	142	55	118
45	60	USA-FLORIDA	PINE ISLANDS/KEY WEST	24.5N	82.0W	24.1N	83.6W	30	E	100	N	N	84	286	18:3:49	121	143	56	118
45	61	CUBA	CORTES BAY/SAN FLEPIE IB	22.0N	84.0W	23.1N	82.8W	80	SW	100	N	N	84	286	18:4:7	121	143	57	118
45	62	CUBA	BATABAND GULF	22.5N	83.0W	22.9N	82.7W	50	SW	100	N	N	84	286	18:4:10	121	143	57	118
45	63	CUBA	CAZONES GULF	22.0N	81.5W	21.6N	81.8W	60	NV	100	N	Y	84	286	18:4:33	120	144	58	118
45	64	CUBA	CAZONES GULF	21.5N	81.5W	21.3N	81.8W	50	NV	100	N	Y	84	286	18:4:39	120	144	58	118
45	65	ATLATNIC OCEAN	PACK ICE IN S ATLANTIC	58.5S	4.4E	58.5S	4.4E	0	100	U	N	N	84	286	18:31:38	127	89	-2	118
45	66	ATLATNIC OCEAN	PACK ICE IN S ATLANTIC	58.8S	6.8E	58.8S	6.8E	0	100	N	N	84	286	18:31:57	127	87	-3	118	
45	67	ATLATNIC OCEAN	PACK ICE IN S ATLANTIC	58.8S	7.7E	58.8S	7.7E	0	100	U	N	N	84	286	18:32:5	127	88	-3	118
45	68	USA-NEVADA	PYRAMID LAKE/RENO	40.0N	118.5W	40.1N	121.0W	80	E	100	N	Y	84	286	18:27:31	123	134	42	118
45	69	USA-NEVADA	BUTTER BUTTE/DROVILLE RE	38.0N	122.0W	39.5N	120.3W	40	W	100	N	Y	84	286	18:27:34	123	134	42	118
45	70	USA-CALIFORNIA	SIERRA NEVADA MTS/MONO L	38.0N	119.5W	38.7N	119.3W	10	NV	100	N	Y	84	286	18:27:42	123	135	42	118
45	71	USA-CALIFORNIA	SIERRA NEVADA MTS/MONO L	38.0N	119.5W	38.3N	119.8W	10	NV	100	N	Y	84	286	18:28:0	123	135	43	118
45	72	USA-CALIFORNIA	SIERRA NEVADA MTS/MONO L	37.5N	118.0W	38.1N	118.7W	5	NV	100	N	Y	84	286	18:28:12	123	136	43	118
45	73	USA-CALIFORNIA	GULF OF CALIFORNIA EDDY	31.5N	114.5W	34.7N	115.1W	30	S	100	N	N	84	286	18:29:20	122	138	47	118
45	74	MEXICO	GULF OF CALIFORNIA EDDY	31.5N	113.5W	34.4N	114.8W	40	S	100	N	N	84	286	18:29:26	122	138	48	118
45	75	MEXICO	GULF OF CALIFORNIA EDDY	32.5N	117.0W	33.8N	114.3W	10	E	100	N	N	84	286	18:29:35	122	139	48	118
45	76	USA-CALIFORNIA	SALTON SEA TO SAN DIEGO	32.5N	117.0W	33.7N	114.2W	10	E	100	N	N	84	286	18:29:39	122	139	48	118
45	77	USA-CALIFORNIA	SALTON SEA TO SAN DIEGO	32.0N	117.0W	33.4N	113.8W	10	E	100	N	N	84	286	18:29:45	122	139	48	118
45	78	USA-CALIFORNIA	SALTON SEA TO SAN DIEGO	32.0N	116.5W	33.0N	113.5W	10	NW	100	N	N	84	286	18:29:53	122	139	49	118
45	79	MEXICO	NORTHERN BAY CALIFORNIA	31.5N	114.5W	32.3N	112.9W	2	NW	100	N	N	84	286	18:30:6	122	139	49	118
45	80	MEXICO	GULF OF CALIFORNIA	31.5N	114.5W	32.3N	112.9W	2	NW	100	N	N	84	286	18:30:16	122	140	50	118
45	81	MEXICO	GULF OF CALIFORNIA EDDY	29.0N	113.0W	31.8N	112.4W	50	SW	100	N	N	84	286	18:30:31	122	140	51	118
45	82	MEXICO	INTERNAL WAVES/GULF OF CA	29.0N	112.5W	31.0N	111.7W	50	SW	100	N	N	84	286	18:30:35	122	140	51	118
45	83	MEXICO	GULF OF CALIFORNIA EDDY	29.0N	112.0W	30.8N	111.5W	50	SW	100	N	N	84	286	18:30:35	122	140	51	118
45	84	MEXICO	GULF OF CALIFORNIA/CLDS	28.0N	110.5W	29.7N	110.6W	80	NV	100	N	N	84	286	18:30:56	121	141	52	118
45	85	MEXICO	BAJA CALIFORNIA/LTEBRE L	28.0N	114.0W	28.0N	109.8W	50	SW	100	N	N	84	286	18:31:10	121	141	52	118
45	86	MEXICO	GULF OF CALIFORNIA	27.5N	110.5W	28.5N	109.6W	80	SW	100	N	N	84	286	18:31:19	121	141	53	118
45	87	MEXICO	GULF OF CALIFORNIA EDDY	26.5N	108.0W	27.2N	108.5W	40	SW	100	N	N	84	286	18:31:43	121	142	54	118
45	88	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLDS	0.0	81.5W	1.4N	82.0W	50	S	100	N	N	84	286	18:39:25	120	147	82	118
45	89	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLDS	0.5S	81.5W	1.1N	81.8W	40	S	100	N	Y	84	286	18:39:35	120	147	82	118
45	90	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLDS	0.5S	81.5W	0.9N	81.7W	30	E	100	N	Y	84	286	18:39:49	120	147	82	118
45	91	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLDS	1.0S	81.5W	0.1N	81.2W	70	S	100	N	N	84	286	18:40:11	120	147	81	118
45	92	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLDS	0.0	80.5W	1.1S	80.5W	50	N	100	N	N	84	286	18:40:13	120	147	81	118
45	93	GALAPAGOS ISLANDS	PACIFIC OCEAN/CLDS	0.5S	80.5W	1.2S	80.4W	60	N	100	N	N	84	286	18:40:32	120	147	81	118
45	94	PACIFIC OCEAN	CLDS	2.3S	89.8W	2.3S	89.8W	80									146	60	118

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE DRB
45	95	PACIFIC OCEAN	CELLULAR CLOUD PATTERNS	7.38 86.8W	7.38 86.8W	80	N N N 84 288	18:42: 1	120	148 58 119
45	96	CHILE	COASTLINE/ANDES MTS	31.08 71.5W	28.18 73.1W	10 SE	N N N 84 288	18:48:18	122	141 40 119
45	97	CHILE	RIO LIMARI/RESERVOIRS	30.58 71.0W	28.55 71.0W	10 SE	N N N 84 288	18:48:42	122	141 39 118
45	98	CHILE	ANDES/RIO DE LAS LAGUNAS	31.58 70.5W	30.38 71.9W	5 S	N N N 84 288	18:48:57	123	140 38 119
45	99	ARGENTINA	ANDES/RIO DE LAS LAGUNAS	31.58 70.5W	30.38 71.0W	10 S	N N N 84 288	18:49: 3	123	140 38 119
45	100	ARGENTINA	ANDES/RIO DE LAS LAGUNAS	32.08 70.0W	30.88 70.7W	10 S	N N N 84 288	18:49:11	123	140 38 119
45	101	CHILE	ANDES/LAGUNA LLANCANELO	38.08 70.5W	33.18 68.7W	30 SW	N N N 84 288	18:49:11	123	138 35 119
45	102	CHILE	ANDES/LAGUNA LLANCANELO	38.08 70.5W	33.18 68.7W	30 SW	N N N 84 288	18:49:11	123	138 35 119
45	103	ARGENTINA	RIO COLORADO/80 PAMPAS	38.08 69.5W	38.28 63.6W	20	NV 100 N 84 288	18:51:52	124	135 28 119
45	104	ARGENTINA	PAMPAS/COASTLINE/CLOUDS	38.08 69.0W	38.08 62.6W	40 E	N N N 84 288	18:51:50	124	135 28 119
45	105	ARGENTINA	PAMPAS/COASTLINE/CLOUDS	38.08 68.0W	38.28 62.4W	60 E	N N N 84 288	18:51:53	124	135 28 119
45	106	ARGENTINA	PAMPAS/COASTLINE/CLOUDS	38.08 67.0W	38.48 62.2W	80 NE	N N N 84 288	18:51:57	124	135 28 119
45	107	ARGENTINA	PAMPAS/COASTLINE/CLOUDS	38.08 67.0W	38.88 61.6W	80 NE	N N N 84 288	18:52: 8	124	134 28 119
45	108	ARGENTINA	PAMPAS/COASTLINE/CLOUDS	37.58 67.5W	40.98 60.2W	80 NE	N N N 84 288	18:52:30	124	133 28 119
45	109	ARGENTINA	PAMPAS/COASTLINE/CLOUDS	38.58 66.5W	41.28 59.8W	60 NE	N N N 84 288	18:52:35	124	133 28 119
45	110	ATLANTIC OCEAN	CLOUDS/WATER/BUNGLINT	48.48 56.5W	43.48 56.8W	40	N F N 84 288	18:53:12	125	131 23 119
45	111	ATLANTIC OCEAN	CLOUDS AND WATER	44.88 54.8W	44.98 54.6W	16	N N N 84 288	18:53:57	125	128 21 119
45	112	ATLANTIC OCEAN	CLOUDS AND WATER	45.78 53.3W	45.78 53.3W	20	N N N 84 288	18:54:16	125	128 20 119
45	113	ATLANTIC OCEAN	DRIFT ICE/NAVE CLOUDS	55.98 23.4W	55.88 23.4W	70	N N N 84 288	18:59:43	127	104 0 118
45	114	ATLANTIC OCEAN	TRANSVERSE CLOUD WAKEN	58.28 21.4W	58.28 21.4W	80	N N N 84 288	20: 01 1	127	102 -0 118
45	115	ATLANTIC OCEAN	PACK ICE AND CLOUDS	58.78 18.0W	58.78 16.0W	50	N N N 84 288	20: 01:47	127	98 -3 119
45	116	ATLANTIC OCEAN	PACK ICE AND CLOUDS	58.98 15.6W	58.88 15.5W	50	N N N 84 288	20: 01:52	127	97 -3 118
45	117	ATLANTIC OCEAN	SIR-B ANTENNA	57.18 8.1W	57.18 8.1W	82	N N N 84 288	20: 1:42	127	82 -8 118
45	118	ATLANTIC OCEAN	SIR-B ANTENNA	57.18 8.1W	57.18 8.1W	82	N N N 84 288	20: 1:42	127	81 -7 118
45	119	ATLANTIC OCEAN	SIR-B ANTENNA	57.18 8.1W	57.18 8.1W	82	N N N 84 288	20: 1:42	127	81 -7 118
45	120	ATLANTIC OCEAN	SIR-B ANTENNA	57.18 8.1W	57.18 8.1W	82	N N N 84 288	20: 1:42	127	81 -7 118
46	2	SPAIN	NORTHWESTERN COASTLINE	43.0N 8.5W	42.8N 7.7W	20	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	3	SPAIN	NORTHWESTERN COASTLINE	43.0N 8.0W	42.6N 7.3W	20	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	4	SPAIN	RICOBAYO RESERVOIR	41.5N 5.5W	41.5N 5.5W	0	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	5	SPAIN	SANTA TERESA RESERVOIR	41.5N 5.5W	41.1N 5.3W	0	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	6	SPAIN	TAGUS RIVER	38.5N 5.0W	40.1N 4.1W	0	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	7	SPAIN	TAGUS RIVER	38.5N 4.5W	38.8N 3.5W	0	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	8	SPAIN	COSTA DEL SOL/GRANADA	37.5N 4.0W	37.7N 1.2W	25 W	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	9	SPAIN	COSTA DEL SOL/GRANADA	37.5N 3.5W	37.2N 0.7W	30 W	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	10	ALGERIA	IRARRARENE	28.5N 7.5E	28.4N 8.0E	5	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	11	ZAIRE	ITIMBIRI RIVER/AKETI	2.5N 28.5E	2.0N 24.8E	85	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	12	ZAIRE	ZAIRE RIVER	2.5N 28.5E	2.0N 24.8E	85	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	13	ZAMBIA	LAKE BANGWEULU	12.0S 30.0E	10.4S 31.6E	80 SW	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	14	ZAMBIA	LAKE BANGWEULU	11.5S 30.5E	10.6S 31.6E	80 SW	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	15	MOZAMBIQUE	ZAMBEZI RIVER/FIRES	19.0S 38.5E	18.5S 36.8E	20	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	16	MOZAMBIQUE	ZAMBEZI RIVER/FIRES	19.0S 38.5E	18.5S 36.8E	20	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	17	MOZAMBIQUE	UNEXPOSED	19.0S 38.5E	18.5S 36.8E	20	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	18	MOZAMBIQUE	UNEXPOSED	19.0S 38.5E	18.5S 36.8E	20	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	19	SUDAN	KHASHIM EL OUBA DAN	15.5N 36.5E	11.5N 36.6E	50 NW	NV 100 N 84 288	20: 2:14	127	88 -8 118
46	20	CANADA-NWT	AKIMISKI ISLAND	53.0N 81.0W	54.0N 81.5W	0	NV 250 U Y 84 288	20: 2:14	127	88 -8 118
46	21	CANADA-NWT	AKIMISKI ISLAND	53.0N 81.0W	54.0N 81.5W	0	NV 250 U Y 84 288	20: 2:14	127	88 -8 118
46	22	CANADA-NWT	AKIMISKI ISLAND	53.0N 81.0W	54.0N 81.5W	0	NV 250 U Y 84 288	20: 2:14	127	88 -8 118
46	23	CANADA-NWT	AKIMISKI ISLAND/DARK	53.0N 81.0W	54.0N 81.5W	10 W	NV 250 U Y 84 288	20: 2:14	127	88 -8 118
46	24	CANADA-NWT	AKIMISKI ISLAND/DARK	53.0N 81.0W	54.0N 81.5W	10 W	NV 250 U Y 84 288	20: 2:14	127	88 -8 118
46	25	CANADA-NWT	AKIMISKI ISLAND/DARK	53.0N 81.0W	54.0N 81.5W	10 W	NV 250 U Y 84 288	20: 2:14	127	88 -8 118

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT	LONG	NADIR LAT	LONG	CCX	DR	TL	FL	E	S	DATE	GMT	ALT	NADIR AZI	ELE	ORB
46	26		VERY DARK	50.0N	86.5W	50.3N	70.5W							250 U N 84 286	14:56:50	124	121	28	118
46	27		VERY DARK	50.0N	86.5W	50.2N	70.2W							250 U N 84 286	14:56:54	124	121	29	116
46	28		VERY DARK	50.0N	86.5W	50.1N	70.1W							250 U N 84 286	14:56:55	124	122	29	116
46	29		VERY DARK	50.0N	86.5W	50.1N	69.9W							250 U N 84 286	14:56:57	124	122	30	116
46	30	CANADA-Q	SEPT-ILES/VERY DARK	50.0N	86.5W	49.0N	67.4W	0						NV 250 U N 84 286	14:57:27	124	124	30	116
46	31	CANADA-Q	RESERVOIR MANICOUAGAN	51.5N	68.5W	48.7N	68.8W	60	NW	L0	250	U	Y	84 286	14:57:35	124	124	31	116
46	32	CANADA-Q	ILE D'ANTICOSTI/DARK	50.0N	84.0W	48.1N	65.7W	0	NE	L0	250	U	Y	84 286	14:57:43	124	125	32	116
46	33	CANADA-Q	ILE D'ANTICOSTI/DARK	50.0N	83.5W	48.0N	65.5W	0	NE	L0	250	U	Y	84 286	14:57:52	124	125	32	116
46	34	CANADA-Q	ILE D'ANTICOSTI/DARK	48.5N	63.5W	47.8N	65.2W	2	NE	L0	250	U	Y	84 286	14:57:58	124	125	32	116
46	35	CANADA-Q	ILE D'ANTICOSTI/DARK	49.5N	63.5W	47.7N	64.8W	2	NE	L0	250	U	Y	84 286	14:57:59	124	126	32	116
46	36	CANADA-Q	ILE D'ANTICOSTI/DARK	48.5N	63.0W	47.8N	64.9W	2	NE	L0	250	U	Y	84 286	14:58:1	124	126	32	116
46	37	CANADA-Q	ILE D'ANTICOSTI/DARK	49.0N	62.5W	47.4N	64.4W	1	NE	L0	250	U	Y	84 286	14:58:1	124	126	33	116
46	38	CANADA-Q	ILE D'ANTICOSTI/DARK	49.0N	62.5W	47.3N	64.2W	1	NE	L0	250	U	Y	84 286	14:58:1	124	126	33	116
46	39	CANADA-Q	ILE D'ANTICOSTI/DARK	49.0N	62.0W	47.2N	63.9W	3	NE	L0	250	U	Y	84 286	14:58:12	124	126	33	116
46	40	CANADA-Q	GASPE PENINSULA/DARK	48.5N	64.5W	46.8N	63.1W	5	NW	L0	250	U	Y	84 286	14:58:23	124	127	34	116
46	41	CANADA-Q	GASPE PENINSULA/DARK	48.5N	65.0W	46.6N	62.9W	10	NW	L0	250	U	Y	84 286	14:58:26	124	127	34	116
46	42	CANADA-Q	GASPE PENINSULA/DARK	48.0N	65.5W	46.5N	62.6W	10	NW	L0	250	U	Y	84 286	14:58:30	124	127	34	116
46	43	CANADA-Q	MINAS BASIN/VERY DARK	45.5N	63.5W	45.5N	61.0W	75	W	L0	250	U	N	84 286	14:58:53	124	128	35	116
46	44	CANADA-Q	HALIFAX/VERY DARK	44.5N	63.5W	45.3N	60.6W	50	W	L0	250	U	N	84 286	14:58:58	124	128	36	116
46	45	CANADA-Q	SABLE ISLAND	44.0N	60.0W	44.6N	59.5W	50						NV 250 U Y 84 286	14:59:14	124	130	36	116
46	46		SABLE ISLAND	44.0N	60.0W	44.1N	58.8W	40						NV 250 U Y 84 286	14:59:25	124	130	37	116
46	47	BRAZIL	COASTLINE/VERY DARK	4.0N	51.0W	5.0N	50.6W	80	S	H0	100	U	N	84 286	16:39:44	120	146	62	117
46	48	BRAZIL	COASTLINE/VERY DARK	1.0N	48.5W	5.7N	49.3W	70	S	H0	100	U	N	84 286	16:40:25	118	146	62	117
46	49	BRAZIL	COASTLINE	3.5N	50.5W	4.2N	48.4W	75	SW	L0	100	N	Y	84 286	16:40:51	119	146	62	117
46	50	BRAZIL	COASTLINE	4.0N	51.0W	4.0N	48.3W	85	W	L0	100	N	Y	84 286	16:40:54	118	146	62	117
46	51	BRAZIL	COASTLINE	4.0N	51.0W	3.8N	48.2W	85	W	L0	100	N	Y	84 286	16:40:58	119	146	62	117
46	52	BRAZIL	COASTLINE	3.0N	50.5W	3.5N	48.0W	85	W	L0	100	N	Y	84 286	16:41:1	119	146	62	117
46	53	BRAZIL	COASTLINE	4.0N	51.0W	3.2N	47.8W	85	SW	L0	100	N	N	84 286	16:41:1	119	146	62	117
46	54	BRAZIL	ILHA DE MARAJÓ	1.5S	48.5W	2.3N	47.4W	90	SW	L0	100	N	N	84 286	16:41:24	119	146	61	117
46	55	BRAZIL	ILHA DE MARAJÓ	1.5S	48.0W	2.1N	47.2W	90	SW	L0	100	N	N	84 286	16:41:28	119	146	61	117
46	56	BRAZIL	ILHA DE MARAJÓ	1.5S	49.5W	1.8N	47.1W	90	SW	L0	100	N	N	84 286	16:41:32	119	146	61	117
46	57	BRAZIL	BAIA DE MARAJÓ	1.5S	49.5W	1.0N	46.8W	90	SW	L0	100	N	N	84 286	16:41:47	119	147	61	117
46	58	BRAZIL	BAIA DE MARAJÓ	2.0S	49.5W	0.8N	46.5W	90	SW	L0	100	N	N	84 286	16:41:50	119	147	61	117
46	59	BRAZIL	AMAZON RIVER	0.0	50.0W	0.5N	46.3W	80	W	H0	100	N	N	84 286	16:41:58	119	147	61	117
46	60	BRAZIL	AMAZON RIVER	0.5S	50.5W	0.3N	46.2W	85	W	H0	100	N	N	84 286	16:41:59	119	147	61	117
46	61	BRAZIL	AMAZON RIVER	1.0S	51.0W	0.1N	46.1W	90	W	H0	100	N	N	84 286	16:42:1	119	147	61	117
46	62	BRAZIL	BAIA DE MARAJÓ	1.0S	48.5W	0.4S	45.7W	85	W	L0	100	N	N	84 286	16:42:14	119	147	61	117
46	63	BRAZIL	RIO TOCANTINS, RIO PARA	1.5S	47.5W	0.8S	45.5W	95	W	L0	100	N	N	84 286	16:42:21	119	147	60	117
46	64	BRAZIL	COASTLINE	2.5S	43.0W	3.3S	44.1W	60						NV 100 N N 84 286	16:43:1	119	146	59	117
46	65	BRAZIL	RIO PARANAIBA	4.0S	43.0W	4.0S	43.7W	95						NV 100 N N 84 286	16:43:17	120	148	59	117
46	66		TERESINA	5.0S	43.0W	4.8S	43.2W	95						NV 100 N N 84 286	16:43:31	120	146	59	117
46	67	BRAZIL	SOBRADINHO RESERVOIR	9.5S	41.0W	8.2S	41.3W	80						NV 100 N Y 84 286	16:44:30	120	146	57	117
46	68	BRAZIL	SOBRADINHO RESERVOIR	9.5S	41.5W	8.5S	41.1W	50						NV 100 N Y 84 286	16:44:36	120	146	58	117
46	69	BRAZIL	SERRA DA JACOBINA	10.5S	40.5W	8.8S	40.9W	40						NV 100 N Y 84 286	16:44:41	120	146	56	117
46	70	BRAZIL	SERRA DA JACOBINA	10.5S	40.0W	9.1S	40.7W	50						NV 100 N Y 84 286	16:44:47	120	146	56	117
46	71	BRAZIL	SALVADOR	13.5S	39.0W	11.6S	38.2W	70	S	L0	100	N	N	84 286	16:45:30	120	146	54	117
46	72	BRAZIL	SALVADOR	13.0S	38.0W	12.8S	38.4W	70						NV 100 N N 84 286	16:45:54	120	146	53	117
46	73	COLOMBIA	RIO MAGDALENA	9.5N	74.5W	8.8N	74.3W	90						NV 100 N N 84 286	18:1	120	146	62	118
46	74	COLOMBIA	RIO MAGDALENA	8.0N	74.0W	8.4N	73.4W	90						NV 100 N Y 84 286	18:1	120	146	62	118
46	75	COLOMBIA	RIO MAGDALENA	7.5N	73.5W	7.8N	73.1W	90						NV 100 N Y 84 286	18:1	120	146	62	118

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE DRB
48	76	COLOMBIA	RIO CHICAMOCUA	8.5N 78.0W	7.2N 72.7W	80	100 N Y 84 288	181 8:51 118	145	82 118
48	77	COLOMBIA	RIVER AND CLOUDS	4.1N 71.0W	4.1N 71.0W	80	100 N Y 84 288	181 8:45 119	145	82 118
48	78	BRAZIL	AMAZON RIVER	2.5S 87.5W	2.3S 87.2W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	79	BRAZIL	AMAZON RIVER	2.0S 87.0W	2.7S 87.0W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	80	BRAZIL	RIO MADEIRA	8.5S 84.0W	8.2S 83.8W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	81	BRAZIL	LAND CLEARING	10.0S 82.8W	10.0S 82.8W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	82	BRAZIL	LAND CLEARING	10.4S 82.5W	10.4S 82.5W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	83	BRAZIL	LAND CLEARING	10.8S 82.3W	10.8S 82.3W	70	100 N Y 84 288	181 8:45 119	145	80 118
48	84	BRAZIL	LAND CLEARING	11.2S 82.0W	11.2S 82.0W	70	100 N Y 84 288	181 8:45 119	145	80 118
48	85	BRAZIL	LAND CLEARING	11.5S 81.5W	11.5S 81.5W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	86	BRAZIL	LAND CLEARING	12.0S 81.5W	12.0S 81.5W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	87	BRAZIL	LAND CLEARING	13.8S 80.4W	13.8S 80.4W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	88	BOLIVIA	CORIXA GRANDE	17.0S 88.5W	16.8S 88.6W	40	100 N Y 84 288	181 8:45 119	145	80 118
48	89	BRAZIL	RIO LOURENCO	17.8S 87.0W	18.0S 87.8W	15	100 N Y 84 288	181 8:45 119	145	80 118
48	90	BRAZIL	MATO GROSSO DO SUL	20.0S 58.5W	20.0S 58.5W	40	100 N Y 84 288	181 8:45 119	145	80 118
48	91	BRAZIL	PONTA FORA	22.0S 55.5W	21.5S 55.4W	35	100 N Y 84 288	181 8:45 119	145	80 118
48	92	BRAZIL	PONTA FORA	22.0S 55.5W	21.5S 55.4W	35	100 N Y 84 288	181 8:45 119	145	80 118
48	93	BRAZIL	PONTA FORA	22.0S 55.5W	21.5S 55.4W	35	100 N Y 84 288	181 8:45 119	145	80 118
48	94	BRAZIL	RIO PARANA	22.0S 55.5W	21.5S 55.4W	35	100 N Y 84 288	181 8:45 119	145	80 118
48	95	BRAZIL	RIO PARANA	22.0S 55.5W	21.5S 55.4W	35	100 N Y 84 288	181 8:45 119	145	80 118
48	96	BRAZIL	RIO PARANA	22.0S 55.5W	21.5S 55.4W	35	100 N Y 84 288	181 8:45 119	145	80 118
48	97	PARAGUAY	ITAIPOU RESERVOIR	24.0S 54.5W	23.3S 54.1W	0	100 N Y 84 288	181 8:45 119	145	80 118
48	98	PARAGUAY	ITAIPOU RESERVOIR	24.0S 54.5W	23.3S 54.1W	0	100 N Y 84 288	181 8:45 119	145	80 118
48	99	PARAGUAY	ITAIPOU RESERVOIR	24.0S 54.5W	23.3S 54.1W	0	100 N Y 84 288	181 8:45 119	145	80 118
48	100	BRAZIL	RIO IGUAZU/RIO CHOPIN	25.0S 54.5W	25.0S 54.5W	10	100 N Y 84 288	181 8:45 119	145	80 118
48	101	BRAZIL	SNOKE	26.0S 52.0W	25.8S 52.4W	30	100 N Y 84 288	181 8:45 119	145	80 118
48	102	POLAND	CLOUDS	27.5S 50.5W	27.5S 50.5W	80	100 N Y 84 288	181 8:45 119	145	80 118
48	103	POLAND	CLOUDS	30.5N 17.0E	30.5N 17.0E	85	100 U N 84 287	8:43 7 125	120	28 128
48	104	POLAND	CLOUDS	50.5N 18.1E	50.5N 18.1E	85	100 U N 84 287	8:43 7 125	120	28 128
48	105	TURKEY	BLACK SEA COASTLINE	48.5N 22.3E	48.5N 22.3E	85	100 U N 84 287	8:43 7 125	120	28 128
48	106	TURKEY	BLACK SEA COASTLINE	42.0N 33.0E	41.8N 33.4E	25	100 N N 84 287	8:48 148 123	133	39 128
48	107	TURKEY	NORTH CENTRAL	41.5N 33.9E	41.5N 33.9E	0	100 N N 84 287	8:48 148 123	133	39 128
48	108	TURKEY	BLACK SEA COASTLINE	41.5N 35.5E	40.8N 34.8E	0	100 N N 84 287	8:48 148 123	133	39 128
48	109	TURKEY	LAKE VAN/LAKE URMIA	38.5N 49.5E	38.4N 37.7E	20	100 N N 84 287	8:48 148 123	133	39 128
48	110	TURKEY	LAKE VAN/MT ARARAT	38.5N 44.0E	38.0N 38.2E	25	100 N N 84 287	8:48 148 123	133	39 128
48	111	TURKEY	DIYARBAKIR	38.0N 40.5E	37.8N 38.5E	0	100 N N 84 287	8:48 148 123	133	39 128
48	112	SYRIA	SYRIAN BORDER	37.0N 40.0E	36.7N 38.5E	0	100 N N 84 287	8:48 148 123	133	39 128
48	113	IRAQ	EUPHRATES RIVER	35.0N 40.5E	35.5N 40.8E	10	100 N N 84 287	8:48 148 123	133	39 128
48	114	IRAQ	BAGHDAD	33.5N 44.0E	32.6N 43.8E	0	100 N N 84 287	8:48 148 123	133	39 128
48	115	KUWAIT	AN NAJAF	32.0N 44.5E	31.9N 44.3E	0	100 N N 84 287	8:48 148 123	133	39 128
48	116	KUWAIT	AL KUMAYT/SNOKE PLUMES	29.5N 48.0E	29.2N 46.5E	0	100 N N 84 287	8:48 148 123	133	39 128
48	117	SAUDI ARABIA	PERSIAN GULF/SNOKE	28.0N 49.0E	27.4N 48.0E	0	100 N N 84 287	8:48 148 123	133	39 128
48	118	CHAD	CHADIAN BARRAGE	26.5N 10.0E	26.8N 49.2E	10	100 N N 84 287	8:48 148 123	133	39 128
48	119	CHAD	KURIA KURIA BAY	17.5N 10.0E	17.7N 54.9E	2	100 N N 84 287	8:48 148 123	133	39 128
48	120	CANADA-NWT	BELCHER ISLANDS	56.0N 10.0W	56.0N 10.0W	40	100 N N 84 287	8:48 148 123	133	39 128
48	121	CANADA-NWT	BELCHER ISLANDS	56.0N 10.0W	56.0N 10.0W	40	100 N N 84 287	8:48 148 123	133	39 128
48	122	CANADA-NWT	SUN GLINT	56.0N 10.0W	56.0N 10.0W	40	100 N N 84 287	8:48 148 123	133	39 128
48	123	CANADA-NWT	BRANDBERG	21.0S 14.5E	21.0S 14.5E	0	100 N N 84 287	8:48 148 123	133	39 128
48	124	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	125	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	126	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	127	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	128	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	129	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	130	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	131	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	132	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	133	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	134	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	135	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	136	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	137	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	138	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	139	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	140	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	141	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	142	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	143	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	144	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	145	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	146	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	147	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	148	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	149	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	150	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	151	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	152	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	153	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	154	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	155	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	156	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	157	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	158	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	159	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	160	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	161	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	162	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	163	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	164	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	165	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	166	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	167	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	168	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	169	USA-NEW YORK	LONG ISLAND	40.5N 73.0W	40.5N 73.0W	2	100 N N 84 287	8:48 148 123	133	39 128
48	170	USA-NEW YORK	LONG ISLAND	40.5						

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	MAZIR AZI ELE ORB
47	8	USA-NEW YORK	LONG ISLAND	41.0N 72.0W		25 N LO 250 N N				69
47	9		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	10		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	11		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	12		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	13		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	14		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	15		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	16		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	17		SULLIVAN/LEESTMA-ORIS EXP			250 U N				69
47	18	GREENLAND	CLOUDS	64.0N 50.0W		80 NE HO 250 N N				130
47	19	GREENLAND	CLOUDS	60.0N 45.0W		90 NE HO 250 N N				130
47	20	ATLANTIC OCEAN	CLOUDS			70 HO 250 N N				130
47	21	ATLANTIC OCEAN	CLOUDS			70 HO 250 N N				130
47	22	SPAIN				80 LO 250 N N				130
47	23	SPAIN				80 LO 250 N N				130
47	24	SPAIN				15 250 N N				130
47	25	SPAIN				10 250 N N				130
47	26	PORTUGAL				10 SE LO 250 N N				130
47	27	PORTUGAL	LISBON	38.5N 9.0W		20 SE LO 250 N N				130
47	28	SPAIN	BAIA DE SETUBAL	38.5N 8.5W						130
47	29	SPAIN	ROTA/CAOIZ	37.0N 6.5W		20 SE LO 250 N N				130
47	30	MOROCCO	STRAIT OF GIBRALTAR	36.5N 6.0W		20 SE LO 250 N N				130
47	31	SPAIN	GULF OF CADIZ	37.0N 7.0W		20 SE LO 250 N N				130
47	32	SPAIN	GULF OF CADIZ	37.0N 8.5W		15 NV 250 N N				130
47	33	SPAIN	ROTA/CAOIZ	36.5N 6.0W		10 NV 250 N N				130
47	34	SPAIN	SAN FERNANDO	38.0N 6.0W		10 NV 250 N N				130
47	35	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.5W		5 NV 250 N N				130
47	36	MOROCCO	MEDITERRANEAN COASTLINE	35.5N 4.0W		10 NV 250 N N				130
47	37	MOROCCO	MEDITERRANEAN COASTLINE	35.0N 2.5W		10 NV 250 N N				130
47	38	SPAIN	STRAIT OF GIBRALTAR	36.0N 5.5W		30 NW LO 250 N N				130
47	39	MOROCCO	CAP DE TROIS FOURCHES	35.5N 3.0W		25 NW LO 250 N N				130
47	40	ALGERIA	PLATEAU EL GOLEA	33.0N 5.0E		1 NE LO 250 N N				130
47	41	ALGERIA	GRAND ERG ORIENTAL	28.5N 6.0E		0 E LO 250 N N				130
47	42	ALGERIA	HAMADA DE TINRHERT	27.5N 6.0E		0 NE LO 250 N N				130
47	43	NIGER	PLATEAU DU DJADO	23.0N 15.0E		0 SE LO 250 N N				130
47	44	CAMEROON	LAKE CHAD	13.0N 14.5E		15 250 N N				130
47	45	AFRICA				90 250 N N				130
47	46	AFRICA				30 250 N N				130
47	47	AFRICA				25 250 N N				130
47	48	AFRICA	MITA HILLS DAM	14.0S 29.0E		25 NV 250 N N				130
47	49	ZAMBIA				0 250 N N				130
47	50	AFRICA	CABORA BASSA RESERVOIR	15.5S 31.0E		8 SE LO 250 N Y				130
47	51	MOZAMBIQUE	CABORA BASSA RESERVOIR	16.0S 31.0E		2 SE LO 250 N Y				130
47	52	MOZAMBIQUE	CABORA BASSA RESERVOIR	16.0S 31.5E		2 SE LO 250 N Y				130
47	53	MOZAMBIQUE	CABORA BASSA RESERVOIR	15.5S 32.0E		2 SE LO 250 N Y				130
47	54	MOZAMBIQUE	CABORA BASSA RESERVOIR	15.5S 32.5E		10 SE LO 250 N Y				130
47	55	MOZAMBIQUE	CABORA BASSA RESERVOIR	15.5S 32.5E		20 NV 250 N N				130
47	56		UNEXPOSED							130
47	57	MOZAMBIQUE	INHAMBANE	23.5S 35.5E						130

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S	DATE	BMT	ALT	AZI	ELE	ORB
47	58	CANADA-Q	LABRADOR FOLD BELT	58.5N 88.0W		0	NV	250 N Y					131
47	59	CANADA-Q	LABRADOR FOLD BELT	58.0N 88.0W		0	NV	250 N Y					131
47	60	CANADA-Q	LABRADOR FOLD BELT	58.0N 87.5W		0	NV	250 N Y					131
47	61	CANADA-Q	LABRADOR FOLD BELT	58.0N 87.5W		0	NV	250 N Y					131
47	62	CANADA-Q	LABRADOR FOLD BELT	58.0N 87.0W		0	NV	250 N Y					131
47	63	CANADA-N	KIGLAPAIT MOUNTAINS	57.0N 81.5W		20	NE	LO 250 N N					131
47	64	CANADA-N	KIGLAPAIT MOUNTAINS	57.0N 81.5W		20	NE	LO 250 N N					131
47	65	CANADA-N	SOUTH AULATSIK ISLAND	58.5N 81.5W		15	NE	LO 250 N N					131
47	66	CANADA-N	PAUL ISLAND, DOG ISLAND	58.5N 81.0W		20	NE	LO 250 N N					131
47	67	CANADA-N	HARP LAKE	58.0N 82.0W		5	NV	250 N Y					131
47	68	CANADA-N	HARP LAKE, SHAPIO LAKE	58.0N 81.5W		2	NV	250 N Y					131
47	69	CANADA-N	SHAPIO LAKE	58.0N 81.0W		1	NV	250 N Y					131
47	70	CANADA-N	KANAIKTIK RIVER	58.0N 81.0W		0	NV	250 N Y					131
47	71	CANADA-N	KANAIKTIK RIVER	58.0N 80.5W		2	NV	250 N Y					131
47	72	CANADA-N	DOUBLE MER	54.0N 69.5W		8	NV	250 N Y					131
47	73	CANADA-N	DOUBLE MER	54.0N 69.5W		8	NV	250 N Y					131
47	74	AZORES	ILHA DE SAO JORGE	38.5N 28.5W		5	NV	250 N Y					131
47	75	AZORES	ILHA DO PICO	38.5N 28.5W		8	NV	250 N Y					131
47	76	AZORES	ILHA DE SAO JORGE	38.5N 28.5W		8	NV	250 N Y					131
47	77		CLOUDS	38.5N 28.0W		20	HO	250 N Y					131
47	78	AFRICA	CLOUDS			85	LO	250 N N					131
47	79	AFRICA	CLOUDS			85	LO	250 N N					131
47	80	REPUBLIC SOUTH AFRICA	ATLANTIC COASTLINE	30.5S 17.5E		70	NW	LO 250 N N					131
47	81	REPUBLIC SOUTH AFRICA	ATLANTIC COASTLINE	32.0S 18.0E		30	NW	LO 250 N N					131
47	82	REPUBLIC SOUTH AFRICA	ATLANTIC COASTLINE	32.0S 18.5E		30	NW	LO 250 N N					131
47	83	REPUBLIC SOUTH AFRICA	CAPE COLUMBINE	33.0S 18.0E		30	NW	LO 250 N N					131
47	84	REPUBLIC SOUTH AFRICA	ATLANTIC COASTLINE	32.0S 18.0E		30	NW	LO 250 N N					131
47	85	REPUBLIC SOUTH AFRICA	SOUTHERN COASTLINE	34.5S 20.5E		40	NW	LO 250 N N					131
47	86	REPUBLIC SOUTH AFRICA	SOUTHERN COASTLINE	34.5S 21.0E		50	NW	LO 250 N N					131
47	87	REPUBLIC SOUTH AFRICA	SOUTHERN COASTLINE	34.5S 21.5E		70	NW	LO 250 N N					131
47	88	REPUBLIC SOUTH AFRICA	SOUTHERN COASTLINE	34.5S 22.0E		85	NW	LO 250 N N					131
47	89	INDIAN OCEAN	SUN GLINT			80	LO	250 N N					131
47	90	INDIAN OCEAN	SUN GLINT			60	HO	250 N N					131
47	91		ATMOSPHERIC LMB				HO	250 N N					131
47	92		ATMOSPHERIC LMB				HO	250 N N					131
47	93	CANADA-Q	AKINISKI ISLAND	53.0N 02.0W		10	SE	LO 250 N N					132
47	94	CANADA-Q	AKINISKI ISLAND	53.0N 02.5W		25	SE	LO 250 N N					132
47	95	CANADA-Q	AKINISKI ISLAND	52.5N 01.5W		35	SE	LO 250 N N					132
47	96	CANADA-Q	JAMES BAY	52.5N 01.5W		75	SE	LO 250 N N					132
47	97	CANADA-Q	AKINISKI ISLAND	52.5N 00.5W		25	SE	LO 250 N N					132
47	98	CANADA-Q	CHARLTON ISLAND	51.5N 79.0W		90	SE	LO 250 N N					132
47	99	CANADA-Q	NOTTAWAY RIVER	51.0N 78.0W		90	SE	LO 250 N N					132
47	100	CANADA-Q	LAC EVANS	50.5N 77.0W		90	SE	LO 250 N N					132
47	101	CANADA-Q	LAC PUSTICAMICA	48.5N 78.0W		85	SE	LO 250 N N					132
47	102	CANADA-Q	LAC GUEGUEN	47.5N 77.5W		75	SE	LO 250 N N					132
47	103	CANADA-Q	ST LAWRENCE RIVER	47.5N 69.5W		30	SE	LO 250 N N					132
47	104	CANADA-NS	CHENECTO BAY	44.5N 63.5W		50	SE	LO 250 N N					132
47	105	CANADA-NS	BAY OF FUNDY	44.0N 65.0W		50	SE	LO 250 N N					132
47	106	CANADA-NS	BAY OF FUNDY	43.5N 65.5W		60	SE	LO 250 N N					132
47	107	CANADA-NS	BAY OF FUNDY	44.5N 66.5W		40	SE	LO 250 N N					132

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE	ORB
47	108	CANADA-NS	CHIGNECTO BAY	45.5N 64.0W		30 SE LO 250 N N	N				132
48	1	GHANA	COASTLINE	5.0N 2.0W		35 NV 100 N N	N				67
48	2	NAMIBIA	BRANDBERG	21.0S 14.5E		0 NV 100 N N	N				67
48	3	REPUBLIC SOUTH AFRICA	GROOT-SMARTBERGREEKS	33.5S 22.0E		30 NV 100 N Y	Y				67
48	4	REPUBLIC SOUTH AFRICA	GROOT-SMARTBERGREEKS	33.5S 22.5E		30 NV 100 N Y	Y				67
48	5	REPUBLIC SOUTH AFRICA	GROOT-SMARTBERGREEKS	33.5S 23.0E		30 NV 100 N Y	Y				67
48	6	REPUBLIC SOUTH AFRICA	KOUGABERGE	33.5S 23.0E		30 NV 100 N Y	Y				67
48	7	REPUBLIC SOUTH AFRICA	PLETTENBERG BAY	33.5S 23.5E		25 NV 100 N Y	Y				67
48	8	REPUBLIC SOUTH AFRICA	PLETTENBERG BAY	33.5S 24.0E		10 NV 100 N Y	Y				67
48	9	REPUBLIC SOUTH AFRICA	SAINT FRANCIS BAY	34.0S 24.5E		1 NV 100 N N	N				67
48	10	REPUBLIC SOUTH AFRICA	PORT ELIZABETH	34.0S 25.5E		15 NV 100 N N	N				67
48	11		UNDEREXPOSED			50 U N	N				
48	12		UNDEREXPOSED			50 U N	N				
48	13		RMS			50 U N	N				
48	14		RMS			50 U N	N				
48	15		LIGHTS			50 U N	N				
48	16		SULLIVAN/LEESTMA-ORS EXP			50 N N	N				
48	17	USA-MASSACHUSETTS	CAPE COD	41.5N 70.0W		30 NE HO 50 N N	N				69
48	18	USA-NEW YORK	LONG ISLAND	41.0N 72.5W		30 NE HO 50 N N	N				69
48	19	USA-NEW YORK	LONG ISLAND	41.0N 72.5W		30 NE HO 50 N N	N				69
48	20	USA-MASSACHUSETTS	CAPE COD	42.0N 70.0W		30 NE HO 50 N N	N				69
48	21		SULLIVAN/LEESTMA-ORS EXP			50 N N	N				69
48	22		SULLIVAN/LEESTMA-ORS EXP			50 N N	N				69
48	23		SULLIVAN/LEESTMA			50 N N	N				69
48	24		SULLIVAN/LEESTMA			50 N N	N				69
48	25		SULLIVAN/LEESTMA			50 N N	N				69
48	26		SULLIVAN/LEESTMA			50 N N	N				69
48	27		SULLIVAN/LEESTMA			50 N N	N				69
48	28		SULLIVAN/LEESTMA			50 N N	N				69
48	29		SULLIVAN/LEESTMA			50 N N	N				69
48	30		SULLIVAN/LEESTMA			50 N N	N				69
48	31		SULLIVAN/LEESTMA			50 N N	N				69
48	32		SULLIVAN/LEESTMA			50 N N	N				69
48	33		SULLIVAN/LEESTMA			50 N N	N				69
48	34		SULLIVAN/LEESTMA			50 N N	N				69
48	35		SULLIVAN/LEESTMA			50 N N	N				69
48	36		SULLIVAN/LEESTMA			50 N N	N				69
48	37		SULLIVAN/LEESTMA			50 N N	N				69
48	38		SULLIVAN			50 N N	N				69
48	39		SULLIVAN			50 N N	N				69
48	40		SULLIVAN			50 N N	N				69
48	41		WATER/CLOUDS/PENINSULA			50 N N	N				69
48	42		CARGO BAY			100 N N	N				69
48	43		NOTRE DAME BAY			100 N N	N				69
48	44		ILHA DE SAO JORGE			100 N N	N				69
48	45		ILHA TERCEIRA			100 N N	N				69
48	46		ILHA DE SAO MIGUEL			100 N N	N				69
48	47		ILHA DE SAO JORGE			100 N N	N				69
48	48		ISLA DE LA PALMA			100 N N	N				69
48	49		GRAN CANARIA			100 N N	N				69
48	50					100 N N	N				69
48	51					100 N N	N				69
48	52					100 N N	N				69
48	53					100 N N	N				69
48	54					100 N N	N				69
48	55					100 N N	N				69
48	56					100 N N	N				69
48	57					100 N N	N				69
48	58					100 N N	N				69
48	59					100 N N	N				69
48	60					100 N N	N				69
48	61					100 N N	N				69
48	62					100 N N	N				69
48	63					100 N N	N				69
48	64					100 N N	N				69
48	65					100 N N	N				69
48	66					100 N N	N				69
48	67					100 N N	N				69
48	68					100 N N	N				69
48	69					100 N N	N				69
48	70					100 N N	N				69
48	71					100 N N	N				69
48	72					100 N N	N				69
48	73					100 N N	N				69
48	74					100 N N	N				69
48	75					100 N N	N				69
48	76					100 N N	N				69
48	77					100 N N	N				69
48	78					100 N N	N				69
48	79					100 N N	N				69
48	80					100 N N	N				69
48	81					100 N N	N				69
48	82					100 N N	N				69
48	83					100 N N	N				69
48	84					100 N N	N				69
48	85					100 N N	N				69
48	86					100 N N	N				69
48	87					100 N N	N				69
48	88					100 N N	N				69
48	89					100 N N	N				69
48	90					100 N N	N				69
48	91					100 N N	N				69
48	92					100 N N	N				69
48	93					100 N N	N				69
48	94					100 N N	N				69
48	95					100 N N	N				69
48	96					100 N N	N				69
48	97					100 N N	N				69
48	98					100 N N	N				69
48	99					100 N N	N				69
48	100					100 N N	N				69

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCS DR TL FL	E S	DATE	GMT	ALT	NADIR AZI ELE	ORB
48	9	NAMIBIA	BRANDBERG	21.08 14.5E		15	NV 100 U N					4
48	10	NAMIBIA	NAMIB DESERT	24.58 15.0E		0	NV 100 U N					4
48	11		UNEXPOSED									
48	12		CARGO BAY									
48	13						50 N N					
48	14	CANADA-O	SANDY LAKE/ISLAND LAKE	53.0N 94.0W		80 S	HO 50 N N					5
48	15	CANADA-NB	NOVA SCOTIA	44.5N 65.0W		80 SE	LO 50 N N					5
48	16	CANADA-NB		44.0N 65.0W		80 NW	LO 50 N N					5
48	17		ERBS ATTACHED TO ARM				100 N N					
48	18		ERBS ATTACHED TO ARM				100 N N					
48	19		ERBS ATTACHED TO ARM				100 N N					
48	20		ERBS ATTACHED TO ARM				100 N N					
48	21	USSR	SHUSHU ISLAND	50.5N 167.0E		80 SE	LO 100 N N					10
48	22		CLOUDS				HO 100 N N					
48	23	TURKEY	BLACK SEA	42.0N 27.0E		5	NV 100 N Y					17
48	24	TURKEY	AEGEAN SEA/DARDANELLES	41.0N 26.5E		1	NV 100 N Y					17
48	25	TURKEY	BOSPORUS/BLACK SEA	41.5N 28.0E		2	NV 100 N Y					17
48	26	TURKEY	HARMARA SEA	40.5N 28.0E		1	NV 100 N Y					17
48	27	TURKEY	DARDANELLES/AEGEAN SEA	40.0N 27.0E		1	NV 100 N Y					17
48	28	TURKEY	HARMARA SEA/BOSPORUS	41.0N 28.5E		2	NV 100 N Y					17
48	29	TURKEY	HARMARA SEA/BOSPORUS	40.5N 28.0E		1	NV 100 N Y					17
48	30	TURKEY	HARMARA SEA	39.5N 28.5E		1	NV 100 N Y					17
48	31	TURKEY	LAKE IZNIK/BLACK SEA	40.0N 30.5E		10	NV 100 N Y					17
48	32	TURKEY	AFYON/KUTAHYA	39.0N 30.0E		5	NV 100 N Y					17
48	33	TURKEY	AFYON/LAKE EGIRDIR	38.0N 30.5E		5	NV 100 N Y					17
48	34	TURKEY	LAKE EGIRDIR	38.0N 31.0E		0	NV 100 N Y					17
48	35	TURKEY	ANTALYA BAY	37.5N 31.5E		0	NV 100 N Y					17
48	36	TURKEY	ANTALYA BAY	37.0N 32.5E		1	NV 100 N Y					17
48	37	CYPRUS	FAMAGUSTA BAY	35.5N 33.5E		1	NV 100 N Y					17
48	38	CYPRUS	TROODOS MOUNTAINS	35.0N 33.0E		1	NV 100 N Y					17
48	39	CYPRUS	TROODOS MOUNTAINS	35.0N 34.0E		5	NV 100 N Y					17
48	40	LEBANON	BEIRUT/HAIFA	33.5N 35.5E		1	NV 100 N N					17
48	41	JORDAN	SYRIAN DESERT	32.0N 37.5E		3	NV 100 N N					17
48	42	SAUDI ARABIA	AN NAFUD DESERT	30.0N 38.0E		2	NV 100 N N					17
48	43	SAUDI ARABIA	JABAL AJA	28.0N 41.0E		35	NV 100 N Y					17
48	44	SAUDI ARABIA	JABAL BALHA	27.0N 41.5E		30	NV 100 N Y					17
48	45	SAUDI ARABIA	RED SEA	19.5N 38.5E		20 SW	HO 100 N N					17
48	46	YEMEN	RED SEA	16.5N 41.0E		25 SW	HO 100 N N					17
48	47	DEMOCRATIC YEMEN	HADRAMAUT	16.0N 49.5E		0	NV 100 N Y					17
48	48	DEMOCRATIC YEMEN	GULF OF ADEN	15.0N 50.0E		0	NV 100 N Y					17
48	49	SOMALIA	NORTHEASTERN TIP	11.5N 51.0E		15	NV 100 N N					17
48	50	OMAN	ARABIAN SEA	16.0N 58.0E		10 NE	HO 100 N N					17
48	51	OMAN	ARABIAN SEA	16.0N 59.0E		10 NE	HO 100 N N					17
48	52	ENGLAND	ENGLISH CHANNEL	50.5N 4.0W		80 N	HO 100 N N					18
48	53	FRANCE	BAY OF BISCAY/BORDEAUX	45.5N 1.0W		80 SE	LO 100 N N					18
48	54	SPAIN	STRAIT OF GIBRALTAR	36.5N 1.0W		70 SW	HO 100 N N					18
48	55	AFRICA	MALLORCA	41.0N 0.5E		80 NW	HO 100 N N					18
48	56	AFRICA	SAHARA DESERT			50	HO 100 N N					18
48	57	AFRICA	SAHARA DESERT			0	LO 100 N N					18
48	58	NIGER	PLATEAU DU DJADO	22.5N 13.0E		30 SW	HO 100 N N					18

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S	DATE	GMT	ALT	NAZIR AZI ELE	ORB
48	59	AFRICA	SAHARA DESERT	13.0N 32.0E		40	LO 100 N N					18
49	60	SUDAN	NILE RIVER			85	NE LO 100 N N					18
49	61	AFRICA	CLOUDS			90	100 N N					18
48	62	AFRICA	CLOUDS			90	100 N N					18
49	63	MADAGASCAR	CAP SAINT-ANDRE	18.0S 44.5E		50	NV 100 N N					18
48	64		CLOUDS				100 N N					19
49	65	CANADA-M	SPLIT LAKE	56.0N 86.0W		40	N LO 100 N Y					19
49	66	CANADA-M	STEPHENS LAKE	56.5N 84.5W		40	N LO 100 N Y					19
49	67	CANADA-M	NELSON RIVER	57.0N 83.0W		30	N LO 100 N Y					19
49	68	CANADA-M	CHURCHILL RIVER	58.0N 84.5W		50	N LO 100 N Y					19
49	69											
49	70	CANADA-O	HUDSON BAY	58.5N 88.0W		35	N LO 100 N N					19
49	71	CANADA-Q	HUDSON STRAIT	61.0N 72.0W		50	N LO 100 N N					19
49	72	CANADA-MT	BAFFIN ISLAND	64.0N 65.0W		75	N HO 100 N N					19
49	73	CANADA-N	NORTHERN COASTLINE	58.0N 63.0W		60	NE LO 100 N N					19
49	74		CLOUDS				HO 100 N N					19
49	75	PORTUGAL	CAPE SAINT VINCENT	38.0N 9.5W		30	NE LO 100 N N					19
49	76	PORTUGAL	CAPE SAINT VINCENT	37.5N 9.0W		20	NE LO 100 N N					18
49	77	MOROCCO	STRAIT OF GIBALTAR	35.5N 6.5W		10	NE LO 100 N N					19
49	78	MOROCCO	ATLAS MOUNTAINS	32.5N 6.5W		0	NV 100 N N					19
49	79	MOROCCO	ATLAS MOUNTAINS	31.0N 8.5W		0	NV 100 N Y					18
49	80	MOROCCO	ATLAS MOUNTAINS	31.0N 9.0W		0	NV 100 N Y					19
49	81	MOROCCO	ATLAS MOUNTAINS	31.5N 7.0W		0	NV 100 N N					19
49	82	MOROCCO	ATLAS MOUNTAINS	28.5N 8.5W		0	NV 100 N N					19
49	83		CARGO BAY				100 N N					20
49	84	CANADA-A	ROCKY MOUNTAINS	52.0N 116.5W		60	SW HO 100 N N					20
49	85	CANADA-M	LAKE WINNIPEG	55.0N 98.0W		50	SW HO 100 N N					20
49	86	CANADA-Q	LAC MISTASSINI	51.0N 72.0W		70	SE LO 100 N N					20
49	87	CANADA-Q	ST LAWRENCE RIVER	49.5N 67.5W		70	S LO 100 N N					20
49	88	CAPE VERDE ISLANDS	FOGO/SANTIAGO/MAIO	15.5N 24.5W		30	W LO 100 N N					20
49	89	CAPE VERDE ISLANDS	SAO NICOLAU/SANTO ANTAO	16.5N 24.5W		40	W LO 100 N N					20
49	90	CAPE VERDE ISLANDS	FOGO/SANTIAGO/MAIO	15.0N 24.5W		30	W LO 100 N N					20
49	91	SENEGAL	DAKAR	14.0N 16.5W		60	NE LO 100 N N					20
49	92	GUINEA BISSAU	ARQUIPELAGO DOS BIJAGOS	11.5N 16.0W		70	NE LO 100 N N					20
49	93		SUN GLINT				100 N N					21
49	94	CANADA-A	ATHABASCA RIVER	57.0N 111.5W		40	NV 100 N N					21
49	95	CANADA-S	PETER POND LAKE	56.0N 108.5W		40	NV 100 N N					21
49	96		CLOUDS				LO 100 N N					
49	97		CLOUDS				LO 100 N N					
49	98		CLOUDS				LO 100 N N					
49	99											
49	100	USA-ALASKA	BRISTOL BAY	59.0N 160.5W		90	N HO 100 N N					22
49	101	CANADA-YT	ALASKA PENINSULA	56.0N 159.5W		90	NV 100 N N					22
49	102	CANADA-YT	ST ELIAS MOUNTAINS	61.5N 140.5W		70	NE LO 100 N N					22
49	103	CANADA-YT	ST ELIAS MOUNTAINS	61.5N 140.5W		70	NE LO 100 N N					22
49	104	USA-ALASKA	ST ELIAS MOUNTAINS	61.0N 138.0W		70	NE LO 100 N N					22
49	105	USA-MICHIGAN	ST ELIAS MOUNTAINS	59.0N 138.0W		85	NE LO 100 N N					22
49	106	BAHAMAS	GREAT LAKES	44.0N 83.0W		65	NE HO 100 N N					22
49	107	BAHAMAS	ANDROS ISLANDS	25.0N 78.5W		70	S HO 100 N N					22
49	108	TURKS AND CAICOS IS	ACKLINS ISLAND	22.5N 74.0W		70	S LO 100 N N					22
49	109		CAICOS ISLANDS	21.5N 71.5W		70	SE LO 100 N N					22

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S DATE	GMT	ALT	NAZIR AZI ELE DB
48	109		CLOUDS	55.5N 159.5W					
48	110	USA-ALASKA	ALASKA PENINSULA			85 SE		HO 100 N	23
48	111		CLOUDS					HO 100 N	23
48	112		CLOUDS					HO 100 N	23
48	113	USA-UTAH	GREAT SALT LAKE	41.5N 113.0W		40		NV 100 N	23
48	114	USA-UTAH	GREAT SALT LAKE	41.5N 112.5W		50		NV 100 N	23
48	115	USA-UTAH	GREAT SALT LAKE	41.0N 112.5W		50		NV 100 N	23
48	116	USA-UTAH	GREAT SALT LAKE	41.0N 112.0W		50		NV 100 N	23
48	117	USA-UTAH	UTAH LAKE/SALT LAKE CITY	40.5N 112.0W		80		NV 100 N	23
48	118	USA-NEW MEXICO	SAN JUAN RIVER	36.5N 108.0W		85		NV 100 N	23
48	119	USA-NEW MEXICO	RIO GRANDE	37.0N 108.0W		85		NV 100 N	23
48	120	USA-NEW MEXICO	ALBUQUERQUE/RIO GRANDE	35.5N 108.5W		85		NV 100 N	23
50	1		CARGO BAY					50 N	
50	2	CANADA-Q	JAMES BAY	51.0N 78.0W		85 SE		HO 50 N	4
50	3	CANADA-Q	ILE D'ANTICOSTI	48.5N 63.0W		85 S		HO 50 N	4
50	4	CANARY ISLANDS	ISLA DE LA PALMA	28.5N 18.0W		80		NV 250 N	4
50	5	CANARY ISLANDS	ISLA DE LA PALMA	28.5N 18.0W		80		NV 250 N	4
50	6	CANARY ISLANDS	ISLA DE LA PALMA	28.5N 17.5W		85		NV 250 N	4
50	7	CANARY ISLANDS	TENERIFE	28.5N 16.5W		80		NV 250 N	4
50	8	CANARY ISLANDS	TENERIFE	28.0N 16.5W		40		NV 250 N	4
50	9	CANADA-A	ZAMA LAKE	58.5N 118.0W		25 N		LD 250 N	5
50	10	CANADA-A	LAKE CLAIRE	58.5N 112.0W		15 N		LD 250 N	5
50	11	CANADA-A	ATHABASCA RIVER	57.0N 111.5W		5		NV 250 N	5
50	12	CANADA-A	SOUTHERN INDIAN LAKE	57.0N 99.0W		20		NV 250 N	5
50	13	CANADA-O	WINISK RIVER	55.5N 88.0W		20		NV 250 N	5
50	14	CANADA-O	WINISK RIVER	55.5N 88.0W		25		NV 250 N	5
50	15	CANADA-O	MOOSE RIVER	51.5N 80.5W		10 S		LD 250 N	5
50	16		ER88 ATTACHED TO ARM					50 N	
50	17		ER88 ATTACHED TO ARM					50 N	
50	18		ER88 ATTACHED TO ARM					50 N	
50	19		ER88 ATTACHED TO ARM					50 N	
50	20		ER88 ATTACHED TO ARM					50 N	
50	21		ER88 ATTACHED TO ARM					50 N	
50	22		ER88 ATTACHED TO ARM					50 N	
50	23		ER88 ATTACHED TO ARM					50 N	
50	24		ER88 ATTACHED TO ARM					50 N	
50	25		ER88 ATTACHED TO ARM					50 N	
50	26		CLOUDS					HO 50 N	
50	27		CLOUDS					HO 50 N	
50	28		ER88 ATTACHED TO ARM					50 N	
50	29		ER88 ATTACHED TO ARM					50 N	
50	30		ER88 ATTACHED TO ARM					50 N	
50	31		ER88 ATTACHED TO ARM					50 N	
50	32		ER88 ATTACHED TO ARM					50 N	
50	33		ER88 ATTACHED TO ARM					50 N	
50	34		ER88 RELEASED					50 N	
50	35		ER88 RELEASED					50 N	
50	36		ER88 RELEASED					50 N	
50	37		ER88 RELEASED					50 N	
50	38		ER88 RELEASED					50 N	

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S DATE	GMT	ALT	NADIR AZI ELE ORB
50	39		ERBS RELEASED			50 N N			6
50	40		ERBS RELEASED			50 N N			128
50	41	OMAN	JABAL SAMHAN	18.5N 54.5E		1 NV 100 N N			128
50	42	SOCOTRA	ARABIAN SEA	13.5N 54.0E		20 SE LO 100 N N			128
50	43	INDIAN OCEAN	SUN GLINT			5 100 N N			128
50	44	INDIAN OCEAN	SUN GLINT			10 100 N N			128
50	45	INDIAN OCEAN	SUN GLINT			10 100 N N			128
50	46	INDIAN OCEAN	SUN GLINT			10 100 N N			128
50	47	INDIAN OCEAN	SUN GLINT			35 100 N N			128
50	48	INDIAN OCEAN	SUN GLINT			45 100 N N			128
50	49	INDIAN OCEAN	SUN GLINT			45 100 N N			128
50	50	INDIAN OCEAN	SUN GLINT			45 100 N N			128
50	51	INDIAN OCEAN	SUN GLINT			35 100 N N			128
50	52	INDIAN OCEAN	SUN GLINT			25 100 N N			128
50	53	INDIAN OCEAN	SUN GLINT			60 NE LO 100 N N			128
50	54	CHAGOS ARCHIPELAGO	INDIAN OCEAN	5.0S 72.0E		50 SE HO 100 N N			129
50	55		CLOUDS			50 SE HO 100 N N			129
50	56	ITALY	ALPS	46.5N 13.0E		50 SE HO 100 N N			129
50	57	ITALY	ALPS	46.5N 11.0E		50 SE HO 100 N N			129
50	58	SWITZERLAND	ALPS	46.5N 10.0E		50 SE HO 100 N N			129
50	59	ITALY	ALPS	46.5N 10.5E		50 SE HO 100 N N			129
50	60	ITALY	LIGURIAN SEA	45.0N 9.0E		80 NW HO 100 N N			128
50	61	YUGOSLAVIA	ADRIATIC SEA	44.0N 18.0E		80 NE HO 100 N N			129
50	62	ITALY	IONIAN SEA	38.5N 17.0E		40 NV 100 N N			129
50	63	GREECE	PELOPONNESUS	38.0N 24.5E		40 NE HO 100 N N			129
50	64	EGYPT	NILE RIVER/RED SEA	26.5N 31.5E		20 E HO 100 N N			129
50	65	EGYPT	NILE RIVER/RED SEA	25.0N 32.5E		20 E HO 100 N N			129
50	66	EGYPT	LAKE NASSER	23.5N 36.0E		20 NE HO 100 N N			129
50	67	SUDAN	RED SEA	21.0N 37.0E		10 E HO 100 N N			129
50	68	SUDAN	NILE RIVER	22.0N 31.5E		2 NW HO 100 N N			129
50	69	SUDAN	NILE RIVER	20.5N 31.5E		2 N HO 100 N N			128
50	70	SUDAN	NILE RIVER	19.5N 33.0E		2 N HO 100 N N			128
50	71	SUDAN	NILE RIVER	18.0N 33.0E		0 NE LO 100 N N			129
50	72	SUDAN	NILE RIVER	17.0N 34.0E		1 NE LO 100 N N			129
50	73	SUDAN	NEW HALFA IRRIGATION	15.5N 35.5E		5 NE LO 100 N N			129
50	74	SUDAN	RED SEA	12.0N 36.0E		2 NE LO 100 N N			129
50	75	ETHIOPIA	LAKE T'ANA	12.0N 37.5E		20 NV 100 N N			129
50	76	ETHIOPIA	RED SEA	14.5N 39.5E		5 NE HO 100 N N			129
50	77	ETHIOPIA	AFAR DEPRESSION	13.5N 40.0E		5 NE HO 100 N N			129
50	78	ETHIOPIA	ADDIS ABABA	10.0N 40.0E		30 NE LO 100 N N			129
50	79	DJIBOUTI	AFAR DEPRESSION	11.5N 42.5E		40 NE HO 100 N N			129
50	80	SOMALIA	COASTLINE	6.0N 48.0E		80 NE HO 100 N N			129
50	81	GREENLAND	CLOUDS	60.0N 45.0W		90 NE HO 100 N N			130
50	82	ATLANTIC OCEAN	CLOUDS			100 HO 100 N N			130
50	83	SPAIN	CARGO BAY			95 HO 100 N N			130
50	84	SPAIN				80 HO 100 N N			130
50	85	SPAIN				50 HO 100 N N			130
50	86	SPAIN				40 HO 100 N N			130
50	87	SPAIN				30 NE LO 100 N N			130
50	88	SPAIN	MEDITERRANEAN COASTLINE	37.0N 1.5W					

TABLE A-3.- LIST OF STS 41-G HASSELBLAD PHOTOGRAPHY (Concluded)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S DATE	GMT	ALT AZI ELE ORB
50	88	SPAIN	MEDITERRANEAN COASTLINE	39.6N 0.5E		30 NE HO 100 N N			130
50	89	ALGERIA	COASTLINE	36.0N 2.0E		40 NE HO 100 N N			130
50	91	ALGERIA	GRAND ERG ORIENTAL	30.0N 9.0E		20 NE HO 100 N N			130
50	92	NIGER	AIR PLATEAU	19.0N 9.5E		0 NV 100 N N			130
50	93	AFRICA				85			130
50	94	AFRICA				80			130
50	95	AFRICA				80			130
50	96	AFRICA				80			130
50	97	AFRICA				80			130
50	98	AFRICA				80			130
50	98	AFRICA				80			130
50	100	AFRICA				80			130
50	101	AFRICA				80			130
50	102	MOZAMBIQUE	CABORA BASSA RESERVOIR	15.58 31.0E		50 SE LO 100 N N			130
50	103	MOZAMBIQUE	CABORA BASSA RESERVOIR	15.58 32.0E		50 SE LO 100 N N			130
50	104	CANADA-N	LABRADOR	55.5N 61.5W		80 SE HO 100 N N			131
50	105	CANADA-N	LABRADOR	54.5N 62.5W		20 NV 100 N N			131
50	106	CANADA-N	LABRADOR	55.0N 60.5W		35 NE LO 100 N N			131
50	107	CANADA-N	LABRADOR	57.0N 64.0W		50 NW HO 100 N N			131
50	108	CANADA-N	LAKE MELVILLE	54.5N 60.0W		80 NW LO 100 N N			131
50	109	CANADA-N	LAKE MELVILLE	54.0N 59.5W		70 NW LO 100 N N			131
50	110	NAMIBIA	NAMIB DESERT	24.58 15.0E		70 NW HO 100 N N			131
50	111	NAMIBIA	NAMIB DESERT	25.08 17.0E		70 NW HO 100 N N			131
50	112	NAMIBIA	COASTLINE	27.58 18.5E		70 NW HO 100 N N			131
50	113	REPUBLIC SOUTH AFRICA	CAPE COLUMBINE	31.58 18.0E		70 NW HO 100 N N			131
50	114	REPUBLIC SOUTH AFRICA	SOUTHWESTERN TIP	32.58 18.0E		70 NW HO 100 N N			131
50	115	REPUBLIC SOUTH AFRICA	SOUTHERN COASTLINE	34.08 22.0E		80 NW HO 100 N N			131
50	116		CLOUDS			HO 100 N N			
50	117		CLOUDS			HO 100 N N			
50	118		CLOUDS			HO 100 N N			
50	119		CLOUDS			HO 100 N N			
50	120		CLOUDS			HO 100 N N			

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S DATE	GMT	ALT	NADIR AZI ELE	ORB
120	1		-TEST-JOHNSON SPACE CTR								
120	2	USA-MAINE	LAKE CHAMPLAIN	43.0N 70.0W		70 E HO 90	N N				6
120	3	USA-MASSACHUSETTS	CAPE COD/BOSTON	41.5N 70.0W		70 E HO 90	N N				6
120	4	IRELAND	ENGLAND	53.0N 8.0W		80 SW HO 90	N N				15
120	5	USSR	ARAL SEA	45.5N 80.0E		80 SE HO 90	N N				15
120	6	USSR	ARAL SEA	44.5N 58.0E		70 S HO 90	N N				15
120	7	CHINA	TAKLIMAKAN DESERT	38.0N 76.5E		30 NV HO 90	N N				15
120	8	CHINA	TIBET/HIMALAYAS	31.0N 80.0E		10 S HO 90	N N				15
120	9	INDIA	HIMALAYAS	32.0N 76.5E		20 SW HO 90	N N				15
120	10	CHINA	TIBET	34.5N 81.5E		1 NV HO 90	N Y				15
120	11	CHINA	TIBET	34.0N 82.0E		1 NV HO 90	N Y				15
120	12	CHINA	TIBET	33.0N 83.0E		1 NV HO 90	N Y				15
120	13	CHINA	TIBET	33.0N 83.0E		0 NV HO 90	N Y				15
120	14	CHINA	TIBET	32.0N 82.5E		0 NV HO 90	N Y				15
120	15	NEPAL	TIBET/HIMALAYAS	30.0N 81.5E		20 SW LO 90	N N				15
120	16	CHINA	TIBET/HIMALAYAS	31.0N 85.0E		1 NV HO 90	N Y				15
120	17	CHINA	TIBET/HIMALAYAS	28.5N 84.5E		1 NV HO 90	N Y				15
120	18	CHINA	TIBET/HIMALAYAS	29.5N 86.0E		1 NV HO 90	N Y				15
120	19	CHINA	TIBET/HIMALAYAS	29.0N 86.5E		2 NV HO 90	N Y				15
120	20	CHINA	TIBET/HIMALAYAS	28.5N 87.0E		5 NV HO 90	N Y				15
120	21	INDIA	GANGES RIVER/HIMALAYAS	26.5N 86.5E		20 NV HO 90	N Y				15
120	22	CHINA	TIBET/HIMALAYAS	32.0N 82.0E		10 NW HO 90	N N				15
120	23	CHINA	TIBET/HIMALAYAS	32.0N 82.0E		10 NW HO 90	N N				15
120	24	BANGLADESH	GANGES RIVER	25.0N 88.5E		80 NV HO 90	N N				15
120	25	BANGLADESH	GANGES RIVER	23.5N 90.5E		90 NV HO 90	N N				15
120	26	INDIA	MOUTHS OF THE GANGES	22.5N 88.5E		90 W LO 90	N N				15
120	27	BURMA	MOUTHS OF THE IRRAWADDY	18.0N 95.0E		80 SE LO 90	N N				15
120	28	BURMA	MOUTHS OF THE IRRAWADDY	16.0N 95.0E		80 SE LO 90	N N				15
120	29	BURMA	MOUTHS OF THE IRRAWADDY	17.0N 98.5E		80 E LO 90	N N				15
120	30	BURMA	MOUTHS OF THE IRRAWADDY	16.5N 94.5E		80 NV HO 90	N N				15
120	31	MALAYSIA	KUALA LUMPUR	3.5N 101.5E		80 NV HO 90	N Y				15
120	32	MALAYSIA	KUALA LUMPUR	3.5N 101.5E		80 NV HO 90	N Y				15
120	33	INDONESIA	SUMATRA	1.5N 98.5E		80 W LO 90	N N				15
120	34	INDONESIA	SUMATRA/BANGKA	3.0S 108.0E		80 NV HO 90	N N				15
120	35	INDONESIA	SUMATRA	3.5S 102.0E		80 W LO 90	N N				15
120	36	AUSTRALIA-WA	NORTHWEST COASTLINE	20.0S 116.5E		10 NV HO 90	N N				15
120	37	AUSTRALIA-WA	NORTHWEST CAPE	23.0S 114.0E		50 SW LO 90	N N				15
120	38	AUSTRALIA-WA	NORTHWEST CAPE	21.5S 114.0E		40 W LO 90	N N				15
120	39	AUSTRALIA-WA	NORTHWEST CAPE	23.0S 116.0E		50 NW LO 90	N N				15
120	40	PAKISTAN	KARACHI/INDUS RIVER	25.5N 66.0E		1 SE LO 90	N N				16
120	41	PAKISTAN	INDUS RIVER	28.5N 70.5E		10 NE HO 90	N N				16
120	42	OMAN	GULF OF OMAN	22.5N 57.5E		5 W HO 90	N N				16
120	43	PAKISTAN	INDUS RIVER	30.0N 69.0E		5 N HO 90	N N				16
120	44	PAKISTAN	INDUS RIVER	30.0N 67.0E		5 N HO 90	N N				16
120	45	UNITED ARAB EMIRATES	ARABIAN SEA	24.0N 55.0E		25 NW HO 90	N N				16
120	46		CLOUDS OVER OCEAN			HO 90	N N				
120	47		CLOUDS OVER OCEAN			HO 90	N N				
120	48	ENGLAND	STRAIT OF DOVER	53.0N 1.0E		80 SW LO 90	N N				17
120	49	ENGLAND	CLOUDS	52.0N 5.0W		90 W HO 90	N N				17
120	50	GREECE	IONIAN SEA	40.5N 21.0E		35 SW LO 90	N N				17

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S	DATE	GMT	NADIR ALT AZI ELE ORB
120	51 GREECE	EASTERN MEDITERRANEAN	37.0N 25.5E		5 SW LO 90	N N				17
120	52 GREECE	AEGEAN SEA	41.0N 22.0E		25 NW HO 90	N N				17
120	53 TURKEY	GULF OF ANTALYA	37.0N 31.0E		2 NV 90	N N				17
120	54 CYPRUS	TURKEY/SYRIA/LEBANON	35.5N 33.0E		2 NV 90	N N				17
120	55 EGYPT	NILE DELTA	32.0N 31.0E		5 SW LO 90	N N				17
120	56 ISRAEL	LEBANON/SYRIA/JORDAN	32.5N 35.5E		1 NV 90	N N				17
120	57 TURKEY	CYPRUS/GULF OF ANTALYA	40.0N 28.0E		10 NW HO 90	N N				17
120	58 EGYPT	SINAI PENINSULA	28.5N 33.0E		15 SW LO 90	N N				17
120	59 IRAQ	TIGRIS/EUPHRATES RIVERS	34.0N 44.0E		40 NE HO 90	N N				17
120	60 IRAN	PERSIAN GULF	27.0N 53.0E		15 E HO 90	N N				17
120	61 TURKEY	EASTERN MEDITERRANEAN	37.0N 29.0E		1 NW HO 90	N N				17
120	62 TURKEY	EASTERN MEDITERRANEAN	38.0N 28.0E		20 NW HO 90	N N				17
120	63 IRAN	PERSIAN GULF	28.0N 56.0E		5 E HO 90	N N				17
120	64 IRAN	PERSIAN GULF	27.0N 57.0E		5 E HO 90	N N				17
120	65 DEMOCRATIC YEMEN	COASTLINE/SOCOTRA	16.5N 53.0E		5 SE HO 90	N N				17
120	66 ETHIOPIA	AFAR DEPRESSION	10.0N 40.0E		40 SW HO 90	N N				17
120	67 ETHIOPIA	GULF OF ADEN	10.0N 43.0E		50 SW HO 90	N N				17
120	68 SOMALIA	COASTLINE	2.0N 48.0E		80 SW HO 90	N N				17
120	69 SOMALIA	INDIAN OCEAN SUNGLINT	4.0N 47.0E		80 W HO 90	N N				17
120	70 SPAIN	STRAIT OF GIBRALTAR	37.0N 2.0W		70 SW HO 90	N N				18
120	71 GREECE	CRETE/PELOPONNESUS	39.0N 22.0E		50 NE HO 90	N N				18
120	72 GREECE	CRETE/NORTH LIBYA	37.0N 25.0E		20 NE HO 90	N N				18
120	73 SUDAN	NILE RIVER	19.0N 30.0E		40 NE HO 90	N N				18
120	74 MADAGASCAR	MOZAMBIQUE CHANNEL	18.0S 44.0E		60 SE HO 90	N N				18
120	75 MOZAMBIQUE	MOZAMBIQUE CH SUNGLINT	17.0S 40.0E		60 W HO 90	N N				18
120	76 MADAGASCAR	MOZAMBIQUE CH SUNGLINT	20.0S 41.0E		80 W HO 90	N N				18
120	77 MADAGASCAR	MOZAMBIQUE CH SUNGLINT	24.0S 42.0E		80 W HO 90	N N				18
120	78 MADAGASCAR	MOZAMBIQUE CH SUNGLINT	26.0S 42.0E		80 W HO 90	N N				18
120	79 MADAGASCAR	MOZAMBIQUE CH SUNGLINT	28.0S 42.0E		80 W HO 90	N N				18
120	80 MOROCCO	STRAIT OF GIBRALTAR	33.0N 9.0W		80 SE HO 90	N N				19
120	81 AZORES	SUN GLINT/SANTA MARIA	38.0N 13.0W		70 SW LO 90	N N				19
120	82 SPAIN	STRAIT OF GIBRALTAR	37.5N 0.0		20 NE HO 90	N N				19
120	83 MOROCCO	ATLAS MOUNTAINS	30.5N 9.5W		5 NV 90	N Y				19
120	84 MOROCCO	ATLAS MOUNTAINS	30.0N 9.0W		1 NV 90	N Y				19
120	85 SPAIN	STRAIT OF GIBRALTAR	38.5N 6.0W		25 N HO 90	N N				19
120	86 MOROCCO	STRAIT OF GIBRALTAR	34.5N 3.5W		20 N HO 90	N N				19
120	87 ANGOLA	NAMIBIA BORDER	16.0S 17.0E		70 SW LO 90	N N				19
120	88 AFRICA	BAY OF FUNGY	43.0N 15.0W		50 SE HO 90	N N				18
120	89 CANADA-NS	ST LAWRENCE RIVER	47.0N 74.0W		70 S HO 90	N N				20
120	90 CANADA-Q	ST LAWRENCE RIVER	47.0N 74.0W		70 SW HO 90	N N				20
120	91 USA-MASSACHUSETTS	COASTLINE	42.0N 71.0W		80 SW HO 90	N N				20
120	92	CLOUDS			HO 90	N N				
120	93	CLOUDS			HO 90	N N				
120	94	CLOUDS			HO 90	N N				
120	95 CUBA	WESTERN HALF/BAHAMAS	22.5N 77.5W		80 SW HO 90	N N				22
120	96 CUBA	EASTERN HALF/BAHAMAS	21.0N 76.5W		80 S HO 90	N N				22
120	97 BAHAMAS	ANDROS ISLAND/CUBA	24.0N 77.0W		80 SW HO 90	N N				22
120	98 CUBA	WESTERN HALF/BAHAMAS	21.5N 78.5W		70 SW HO 90	N N				22
120	99 CUBA	EASTERN HALF/BAHAMAS	20.5N 75.0W		70 SW HO 90	N N				22
120	100 BAHAMAS	CROOKED ISLAND/CUBA	22.0N 74.0W		80 SW LO 90	N Y				22

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL	E S DATE	GMT	ALT	NAZIR AZI ELE	ORB
120	101	BAHAMAS	MAYAGUANA/ACKLINS	22.0N 73.0W		60 SW LO 90	N Y				22
120	102	BAHAMAS	GREAT INAGUA/CAICOS IS	20.5N 73.0W		70 S HO 90	N N				22
120	103	HAITI	CAICOS ISLANDS	19.0N 72.5W		70 S HO 90	N N				22
120	104	HAITI	SUN GLINT	18.0N 73.5W		70 SW HO 90	N N				22
120	105	DOMINICAN REPUBLIC	SUN GLINT	18.0N 71.0W		70 SW LO 90	N N				22
120	106	HAITI	SUN GLINT	17.5N 72.5W		70 SW HO 90	N N				22
120	107	VENEZUELA	COASTLINE	11.0N 69.0W		70 SW HO 90	N N				22
120	108	VENEZUELA	COASTLINE	10.5N 70.0W		70 SW HO 90	N N				22
120	109	VENEZUELA	COASTLINE	10.5N 67.0W		60 S HO 90	N N				22
120	110	VENEZUELA	COASTLINE	10.0N 66.5W		60 S HO 90	N N				22
120	111	VENEZUELA	ORINOCO RIVER	7.0N 65.0W		80 S HO 90	N N				22
120	112	SOUTH AMERICA	CLOUDS			90 S HO 90	N N				22
120	113	USA-TEXAS	LAGUNA MADRE	26.0N 96.0W		60 NV 90	N N				23
120	114	MEXICO	SUN GLINT/COASTLINE	20.5N 97.5W		70 SW HO 90	N N				23
120	115	MEXICO	SUN GLINT/COASTLINE	19.0N 97.0W		70 SW HO 90	N N				23
120	116	MEXICO	SUN GLINT/COASTLINE	18.0N 97.5W		70 SW HO 90	N N				23
120	117	MEXICO	BAY OF CAMPECHE	17.0N 97.0W		70 SW HO 90	N N				23
120	118	MEXICO	GULF OF MEXICO	25.0N 96.0W		70 NW HO 90	N N				23
120	119	MEXICO	BAY OF CAMPECHE	18.0N 92.5W		60 NV 90	N N				23
120	120	MEXICO	BAY OF CAMPECHE	17.0N 91.5W		80 NW LO 90	N N				23
120	121	PERU	COASTLINE/ANDES MTNS	12.5S 74.5W		80 S HO 90	N N				23
120	122	PERU	COASTLINE/ANDES MTNS	13.5S 73.5W		80 S HO 90	N N				23
120	123	PERU	COASTLINE/ANDES MTNS	12.0S 75.5W		70 SW LO 90	N Y				23
120	124	PERU	COASTLINE/ANDES MTNS	13.0S 74.0W		70 SW LO 90	N Y				23
120	125	PERU	COASTLINE/ANDES MTNS	16.5S 73.0W		70 S HO 90	N N				23
120	126	SOUTH AMERICA	CLOUDS			80 HO 90	N N				23
120	127	ARGENTINA	COASTLINE	36.5S 56.0W		30 SE HO 90	U N				23
120	128	ARGENTINA	COASTLINE	38.0S 56.5W		30 SE HO 90	U N				23
120	129	ARGENTINA	COASTLINE	39.0S 58.5W		60 SW HO 90	U N				23
120	130	ARGENTINA	COASTLINE	40.0S 60.0W		70 SW HO 90	U N				23
120	131	ARGENTINA	COASTLINE	34.5S 58.0W		30 NW HO 90	U N				23
120	132	ARGENTINA	COASTLINE	36.0S 57.5W		40 NW HO 90	U N				23
120	133	ARGENTINA	COASTLINE	34.0S 59.0W		40 NW HO 90	U N				23
120	134	USSR	UNEXPOSED								24
120	135	USSR	SAKHALIN	52.5N 142.0E		50 NV 90	N N				24
120	136	USSR	SAKHALIN	53.5N 142.5E		60 NV 90	N N				24
120	137	USA-CALIFORNIA	COASTLINE	38.0N 120.0W		70 NE HO 90	N N				24
120	138	USA-CALIFORNIA	COASTLINE	35.0N 115.0W		80 NE HO 90	N N				24
120	139	USA-ARIZONA	CALIFORNIA COASTLINE	34.0N 114.0W		80 NE HO 90	N N				24
120	140	MEXICO	BAJA CALIFORNIA	27.0N 110.0W		70 SE HO 90	N N				24
120	141	USA-ARIZONA	BAJA CALIFORNIA	33.0N 113.0W		60 NE HO 90	N N				24
120	142	MEXICO	BAJA CALIFORNIA	30.0N 110.0W		50 NE HO 90	N N				24
120	143	MEXICO	BAJA CALIFORNIA	24.0N 109.0W		50 E HO 90	N N				24
120	144		UNEXPOSED								24
120	145		CLOUDS			HO 90	N N				24
120	146		UNEXPOSED								24
120	147		MOON			HO 90	N N				24
120	148		MOON			HO 90	N N				24
120	149		CLOUDS			HO 90	N N				24
120	150		CLOUDS			HO 90	N N				24

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S	DATE	GMT	ALT	NAZIR AZI ELE	ORB
120	151		CLOUDS	48.0N 142.0E		80	N N					24
120	152		CLOUDS	48.0N 142.0E		80	N N					24
120	153	USSR	SAKHALIN	48.0N 142.0E		70 SE HO 80	O N					25
120	154	USSR	SAKHALIN	47.0N 144.0E		40 SE HO 80	O N					25
120	155	USSR	SAKHALIN	47.0N 144.0E		40 SE HO 80	O N					25
120	156	USSR	SAKHALIN	47.0N 144.0E		50 SE HO 80	O N					25
120	157	TURKEY	BLACK SEA/TAURUS MTNS	40.5N 38.5E		20 SW HO 80	N N					32
120	158	IRAN	LAKE URMIA	35.0N 48.0E		30 SE HO 80	N N					32
120	159	IRAN	LAKE URMIA	35.5N 48.5E		40 SE HO 80	N N					32
120	160	USSR	BLACK SEA/CAUCASUS MTNS	43.0N 42.0E		60 NW HO 80	N N					32
120	161	TURKEY	LAKE URMIA	40.0N 43.0E		40 NW HO 80	N N					32
120	162	TURKEY	LAKE URMIA/ZAGROS MTNS	40.0N 43.0E		60 NW HO 80	N N					32
120	163	IRAN	QESHM/STRAIT OF HORMUZ	27.5N 55.5E		10 NV HO 80	N N					32
120	164	IRAN	STRAIT OF HORMUZ	35.0N 50.0E		20 NW HO 80	N N					32
120	165	UNITED ARAB EMIRATES	STRAIT OF HORMUZ	28.0N 56.0E		5 NW HO 80	N N					32
120	166	ALBANIA	ADRIATIC SEA	41.0N 20.5E		90 NV HO 80	N N					32
120	167	GREECE	RHODOPE MOUNTAINS	40.0N 22.5E		60 NV HO 80	N N					33
120	168	GREECE	AEGEAN SEA	38.5N 23.5E		1 NV HO 80	N Y					33
120	169	GREECE	AEGEAN SEA	38.0N 24.0E		1 NV HO 80	N Y					33
120	170	BULGARIA	DARDANELLES	44.0N 27.5E		30 NE HO 80	N N					33
120	171	TURKEY	DARDANELLES	41.0N 28.0E		20 NE HO 80	N N					33
120	172	GREECE	SEA OF CRETE	37.0N 28.0E		30 NW HO 80	N N					33
120	173	GREECE	SEA OF CRETE	36.5N 28.5E		25 NW HO 80	N N					33
120	174	EGYPT	NILE DELTA	31.0N 31.0E		0 NV HO 80	N Y					33
120	175	EGYPT	NILE DELTA	31.0N 31.5E		0 NV HO 80	N Y					33
120	176	EGYPT	SUEZ CANAL	29.5N 32.0E		0 NV HO 80	N Y					33
120	177	EGYPT	NILE DELTA	31.5N 31.5E		10 N HO 80	N N					33
120	178	EGYPT	RED SEA	28.5N 34.5E		2 NV HO 80	N N					33
120	179	EGYPT	NILE DELTA	29.5N 33.0E		1 NW HO 80	N N					33
120	180	EGYPT	SINAI PENINSULA	28.0N 34.0E		1 N HO 80	N N					33
120	181	EGYPT	SINAI PENINSULA	32.5N 32.5E		10 NW HO 80	N N					33
120	182	EGYPT	SINAI PENINSULA	31.0N 33.0E		15 NW HO 80	N N					33
120	183	SAUDI ARABIA	RED SEA	31.0N 38.0E		30 N HO 80	N N					33
120	184	ETHIOPIA	RED SEA	13.5N 38.5E		35 SW HO 80	N N					33
120	185	ETHIOPIA	AFAR DEPRESSION	12.0N 39.0E		30 SW HO 80	N N					33
120	186	DEMOCRATIC YEMEN	GULF OF ADEN	15.0N 53.0E		40 NE HO 80	N N					33
120	187	DEMOCRATIC YEMEN	GULF OF ADEN	15.0N 53.0E		60 NW HO 80	N N					33
120	188	SOMALIA	COASTLINE	13.5N 48.0E		60 N HO 80	N N					33
120	189	NORTH AMERICA	CLOUDS/VERY DARK	10.5N 53.5E		80 HO 80	N N					33
120	190	NORTH AMERICA	CLOUDS/VERY DARK			70 HO 80	N N					33
120	191	NORTH AMERICA	CLOUDS/VERY DARK			70 HO 80	N N					35
120	192	NORTH AMERICA	CLOUDS/VERY DARK			70 HO 80	N N					129
120	193	CANADA-N	LAKE WINNIPEG/VERY DARK	52.0N 98.5W		80 SW HO 80	N N					129
121	1	MAOAGASCAR	NORTHEAST COASTLINE	12.5S 50.5E		80 NW HO 80	N N					129
121	2	MAOAGASCAR	NORTHEAST COASTLINE	11.0S 50.0E		85 NW HO 80	N N					129
121	3	SOMALIA	COASTLINE	2.0N 48.5E		70 NW HO 80	N N					129
121	4	SOMALIA	COASTLINE	7.0N 50.0E		70 NE HO 80	N N					129
121	5	DEMOCRATIC YEMEN	GULF OF ADEN	15.0N 51.0E		35 NE HO 80	N N					129
121	6	SOMALIA	GULF OF ADEN	12.0N 48.0E		15 NE HO 80	N N					129
121	7	EGYPT	NILE RIVER/RED SEA	22.0N 34.5E		10 NE HO 80	N N					129

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S	GMT	ALT	NAOIR AZI ELE ORB
121	8	EGYPT	NILE RIVER/GULF OF SUEZ	32.0N 31.0E		30 NE HO 90			129
121	9	EGYPT	NILE RIVER/GULF OF SUEZ	31.0N 34.0E		30 NE HO 90			129
121	10	SAUDI ARABIA	RED SEA	27.0N 37.0E		30 E HO 90			129
121	11	SAUDI ARABIA	RED SEA	29.0N 36.0E		30 NE HO 90			129
121	12	LIBYA	COASTLINE	33.0N 23.0E		30 NW HO 90			129
121	13	EGYPT	NILE DELTA	31.0N 34.0E		50 E HO 90			129
121	14	EGYPT	NILE DELTA	31.0N 34.0E		70 E HO 90			129
121	15	GREECE	PELOPONNESUS PENINSULA	38.5N 22.5E		50 NE HO 90			129
121	16	TURKEY	CRETE	36.0N 32.0E		50 E HO 90			129
121	17	TURKEY	PELOPONNESUS PENINSULA	40.5N 26.0E		50 NE HO 90			129
121	18	TURKEY	PELOPONNESUS PENINSULA	40.5N 26.0E		50 NE HO 90			129
121	19	ITALY	SOUTHERN TIP/SICILY	39.0N 16.5E		80 NW HO 90			129
121	20	ITALY	TYRRHENIAN SEA	45.0N 10.0E		80 NW HO 90			129
121	21	ITALY	NAPLES/VESUVIUS	41.5N 16.0E		80 E HO 90			129
121	22	ITALY	NAPLES/VESUVIUS	41.5N 15.0E		80 E HO 90			129
121	23	ITALY	ROME	41.5N 14.0E		70 SE HO 90			129
121	24	ITALY	ALPS	45.0N 11.0E		60 N HO 90			129
121	25	ITALY	ALPS/TORINO	45.0N 7.0E		30 NV HO 90			129
121	26	ITALY	ALPS	47.5N 7.5E		60 NE HO 90			129
121	27	AUSTRIA	ALPS	47.0N 10.0E		70 NE HO 90			129
121	28	ITALY	ALPS	46.0N 8.0E		70 E HO 90			129
121	29	SWITZERLAND	ALPS	48.5N 6.5E		70 SE HO 90			129
121	30	FRANCE	ALPS	48.0N 7.0E		80 SE HO 90			129
121	31	ENGLAND	ENGLISH CHANNEL	50.5N 0.0		90 NE HO 90			129
121	32	ENGLAND	ENGLISH CHANNEL	50.5N 2.0W		90 NE LO 90			129
121	33		CLOUDS			HO 90			128
121	34	IRAN	PERSIAN GULF	30.0N 50.5E		20 SE HO 90			128
121	35	IRAN	ZAGROS MOUNTAINS	36.0N 50.0E		25 NE HO 90			128
121	36	IRAQ	TIGRIS & EUPHRATES RIVER	33.5N 45.0E		10 E HO 90			128
121	37		CLOUDS			HO 90			119
121	38	ARGENTINA	CLOUDS			HO 90			119
121	39	ARGENTINA	PUNTA RASA/RIO NEGRO	41.0S 61.5W		30 NW LO 90			119
121	40	ARGENTINA	BAHIA BLANCA	39.0S 62.0W		25 NV LO 90			119
121	41	CHILE	ANDES MOUNTAINS	32.0S 71.0W		20 NW HO 90			119
121	42	CHILE	ANDES MOUNTAINS	36.0S 70.5W		40 SW HO 90			119
121	43	ARGENTINA	ANDES MOUNTAINS	36.5S 70.5W		40 SW HO 90			119
121	44	CHILE	SANTIAGO/ANDES MOUNTAINS	33.5S 70.0W		2 LO 90			119
121	45	ARGENTINA	ANDES MOUNTAINS/SANTIAGO	33.0S 70.0W		2 NV 90			119
121	46	GALAPAGOS ISLANDS	ISABELA/SAN SALVADOR	3.0N 93.0W		80 NW HO 90			119
121	47	GALAPAGOS ISLANDS	ISABELA/FERNANDINA	0.0 91.0W		65 NV 90			119
121	48	GALAPAGOS ISLANDS	SAN SALVADOR/ISABELA	0.5N 91.5W		75 NV 90			119
121	49	GALAPAGOS ISLANDS	FERNANDINA/ISABELA	1.0N 92.0W		65 NV 90			119
121	50	MEXICO	PACIFIC OCEAN	17.0N 100.0W		70 NW HO 90			119
121	51	USA-NEVADA	SOUTHERN CALIFORNIA	38.0N 118.0W		40 NW HO 90			119
121	52	USA-CALIFORNIA	SOUTHERN CALIFORNIA	38.0N 119.0W		30 NW HO 90			119
121	53	MEXICO	BAJA CALIFORNIA	30.5N 117.5W		50 SW HO 90			119
121	54	USA-CALIFORNIA	LOS ANGELES	32.5N 119.0W		40 SW HO 90			119
121	55	USA-CALIFORNIA	LOS ANGELES	33.0N 119.0W		40 SW HO 90			119
121	56	USA-CALIFORNIA	IMPERIAL VALLEY	30.0N 117.5W		50 S HO 90			119
121	57	MEXICO	IMPERIAL VALLEY	31.0N 118.0W		50 S HO 90			119

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S	DATE	SMT	ALT	NADIR AZI ELE ORB
121	58	USA-CALIFORNIA	LOS ANGELES	33.5N 110.5W		40 SW	HO 80	N N			118
121	59	USA-CALIFORNIA	LOS ANGELES	33.5N 118.5W		40 SW	HO 80	N N			118
121	60	MEXICO	SOUTHERN CALIFORNIA	28.0N 118.0W		50 S	HO 80	N N			118
121	61	USA-CALIFORNIA	LOS ANGELES	33.0N 110.0W		50 SW	HO 80	N N			118
121	62	USA-CALIFORNIA	SAN JOAQUIN VALLEY	34.0N 111.0W		50 SW	HO 80	N N			118
121	63	USA-CALIFORNIA	SAN JOAQUIN VALLEY	38.0N 113.0W		50 SW	HO 80	N N			118
121	64	USA-CALIFORNIA	SAN JOAQUIN VALLEY	35.0N 121.0W		45 SW	HO 80	N N			118
121	65	USA-CALIFORNIA	SAN JOAQUIN VALLEY	36.0N 118.5W		25 S	HO 80	N N			118
121	66	USA-CALIFORNIA	SIERRA NEVADA	31.0N 117.0W		35 SE	HO 80	N N			118
121	67	USA-CALIFORNIA	COAST RANGE	36.0N 112.5W		70 SW	HO 80	N N			118
121	68	USA-CALIFORNIA	SACRAMENTO VALLEY	38.5N 112.5W		70 SW	HO 80	N N			118
121	69	USA-CALIFORNIA	SIERRA NEVADA	37.0N 118.5W		80 SE	HO 80	N N			118
121	70	USA-CALIFORNIA	SIERRA NEVADA	38.0N 118.0W		80 SE	HO 80	N N			118
121	71	USA-CALIFORNIA	SACRAMENTO VALLEY	36.0N 121.0W		70 S	HO 80	N N			118
121	72	BRAZIL	RIO PARANA	24.5S 114.0W		30 NV	HO 80	N Y			118
121	73	BRAZIL	RIO PARANA	23.5S 114.0W		15	NV 80	N Y			118
121	74	BRAZIL	RIO PARANA	23.5S 114.0W		10	NV 80	N Y			118
121	75	CUBA	WESTERN END	22.0N 113.5W		70 SW	LO 80	N N			118
121	76	USA-FLORIDA	FLORIDA KEYS	24.5N 112.0W		70 NE	LO 80	N N			118
121	77	USA-FLORIDA	GULF OF MEXICO	26.0N 112.5W		70 NE	LO 80	N N			118
121	78	MEXICO	YUCATAN PENINSULA	24.0N 118.0W		70 SW	HO 80	N N			118
121	79	USA-GEORGIA	SOUTHERN GEORGIA	31.0N 110.5W		35 NE	HO 80	N N			118
121	80	USA-FLORIDA	GULF OF MEXICO	29.0N 110.0W		70 SE	HO 80	N N			118
121	81	USA-FLORIDA	GULF OF MEXICO	30.0N 110.0W		60 SE	HO 80	N N			118
121	82	USA-FLORIDA	GULF OF MEXICO	30.0N 110.0W		60 SE	HO 80	N N			118
121	83	USA-FLORIDA	GULF OF MEXICO	30.0N 113.5W		60 SE	HO 80	N N			118
121	84	USA-LOUISIANA	MISSISSIPPI RIVER	30.0N 111.5W		85 SW	HO 80	N N			118
121	85	USA-LOUISIANA	MISSISSIPPI RIVER	30.5N 112.0W		80 SW	HO 80	N N			118
121	86	USA-TEXAS	GULF OF MEXICO	29.5N 114.0W		80 SW	HO 80	N N			118
121	87	USA-LOUISIANA	MISSISSIPPI RIVER	30.5N 113.5W		80 SW	HO 80	N N			118
121	88	USA-LOUISIANA	MISSISSIPPI RIVER	30.5N 112.0W		80 S	HO 80	N N			118
121	89	USA-COLORADO	ARKANSAS RIVER	37.0N 113.0W		75 SW	HO 80	N N			118
121	90	USA-COLORADO	ARKANSAS RIVER	37.0N 113.0W		70 SW	HO 80	N N			118
121	91	USA-COLORADO	PLATTE RIVER/AGRICULTURE	40.0N 113.0W		70 SW	HO 80	N N			118
121	92	USA-KANSAS	PLATTE RIVER/AGRICULTURE	39.0N 111.5W		60 SE	HO 80	N N			118
121	93	USA-UTAH	GREAT SALT LAKE	40.0N 110.0W		80 SW	HO 80	N N			118
121	94	USA-WYOMING	BLACK HILLS	43.0N 105.5W		70 SE	HO 80	N N			118
121	95	BRAZIL	SALVADOR/ARACAJU	12.0S 37.0W		80 NE	LO 80	N N			117
121	96	BRAZIL	BAIA DE MARAJO	0.0 47.0W		70 W	LO 80	N N			117
121	97	BRAZIL	ILHA DE MARAJO	0.0 47.5W		70 SW	LO 80	N N			117
121	98	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			80	HO 80	N N			117
121	99	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			80	HO 80	N N			117
121	100	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			80	HO 80	N N			117
121	101	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			90	HO 80	N N			117
121	102	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			90	HO 80	N N			117
121	103	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			90	HO 80	N N			117
121	104	ATLANTIC OCEAN	TROPICAL STORM JOSEPHINE			90	HO 80	N N			117
121	105	USA-GEORGIA	ATLANTIC COASTLINE	32.0N 81.0W		90 SW	HO 80	N N			117
121	106	USA-PENNSYLVANIA	ALLEGHENY MOUNTAINS	41.0N 78.0W		70 NW	HO 80	N N			117
121	107	USA-PENNSYLVANIA	ALLEGHENY MOUNTAINS	41.0N 78.0W		70 NW	HO 80	N N			117

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Continued)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CC% DR TL FL E S DATE GMT	NADIR ALT AZI ELE ORB
121	108	USA-WEST VIRGINIA	ALLEGHENY MOUNTAINS	39.0N 79.5W		60 SW HO 90 N N	117
121	109	CANADA-PEI	PRINCE EDWARD ISLAND	47.0N 84.0W		70 NW HO 90 N N	116
121	110	CANADA-NB	PRINCE EDWARD ISLAND	46.0N 84.5W		65 NW HO 90 N N	116
121	111	CANADA-NS	BAY OF FUNDY	44.5N 65.0W		65 W HO 90 N N	118
121	112	CANADA-Q	ST LAWRENCE RIVER	50.0N 84.0W		85 SW HO 90 N N	115
121	113	MOROCCO	STRAIT OF GIBRALTAR	34.5N 4.0W		20 NW HO 90 N N	114
121	114	MOROCCO	ATLAS MOUNTAINS	31.5N 5.5W		25 W HO 90 N N	114
121	115	SPAIN	STRAIT OF GIBRALTAR	36.5N 5.0W		30 NW HO 90 N N	114
121	116	SPAIN	STRAIT OF GIBRALTAR	36.5N 5.5W		30 NW HO 90 N N	114
121	117	SPAIN	SIERRA MORENA	38.0N 7.0W		25 NW LO 90 N N	114
121	118	PORTUGAL	NORTHERN COASTLINE	41.0N 8.0W		60 N HO 90 N N	114
121	119	PORTUGAL	LISBOA	38.0N 10.0W		60 SW HO 90 N N	114
121	120	SPAIN	NORTHWESTERN COASTLINE	43.0N 9.5W		70 N HO 90 N N	114
121	121	GREENLAND	CLOUDS	64.0N 38.0W		70 NE HO 90 N N	114
121	122	GREENLAND	CLOUDS	60.0N 50.0W		80 NE LO 90 N N	114
121	123	GREENLAND	CLOUDS	62.5N 50.0W		80 NE HO 90 N N	114
121	124	GREENLAND	CLOUDS	62.5N 50.0W		80 NE HO 90 N N	114
121	125	GREENLAND	CLOUDS	64.0N 44.0W		80 NE HO 90 N N	114
121	126	LIBYA	MEDITERRANEAN SEA	32.5N 22.0E		25 NV 90 N N	113
121	127	LIBYA	SICILY	38.5N 15.0E		60 SW LO 90 N N	113
121	128	ITALY	NAPLES/VESUVIUS	41.0N 14.0E		80 NV 90 N N	113
121	129	ITALY	MILAN/ALPS	45.5N 9.0E		35 E LO 90 N N	113
121	130	SYRIA	EUPHRATES RIVER	36.5N 38.0E		0 NW HO 90 N N	112
121	131	ISRAEL	MEDITERRANEAN SEA	31.0N 35.0E		25 SW HO 90 N N	112
121	132	TURKEY	BLACK SEA	42.0N 35.0E		20 NW HO 90 N N	112
121	133	CYPRUS	MEDITERRANEAN SEA	33.0N 32.0E		5 SW HO 90 N N	112
121	134	TURKEY	MEDITERRANEAN SEA	35.0N 29.0E		2 SW HO 90 N N	112
121	135	TURKEY	MEDITERRANEAN SEA	37.0N 26.0E		15 SW HO 90 N N	112
121	136	TURKEY	ISTANBUL/MARMARA SEA	39.5N 26.0E		30 SW HO 90 N N	112
121	137	LIBYA	MEDITERRANEAN SEA	33.0N 12.0E		60 S HO 90 N N	97
121	138	ENGLAND	ENGLISH CHANNEL	53.0N 4.0W		65 NW HO 90 N N	97
121	139	FRANCE	ENGLISH CHANNEL	51.5N 2.5E		65 N LO 90 N N	97
121	140	MEXICO	SOUTHERN CALIFORNIA	31.5N 115.5W		50 S HO 90 N N	87
121	141	MEXICO	CLOUDS			HO 90 N N	
121	142		VERY DARK			HO 90 U N	
121	143		VERY DARK			HO 90 U N	
121	144		VERY DARK			HO 90 U N	
121	145	MOROCCO	MEDITERRANEAN SEA	36.0N 3.0W		70 NW HO 90 U N	82
121	146	MOROCCO	COASTLINE	5.0N 48.5E		70 NE HO 90 N N	81
121	147	SOMALIA	COASTLINE/DARK	8.0N 48.0E		90 NE HO 90 U N	81
121	148	SOMALIA	VERY DARK			HO 90 U N	
121	149		VERY DARK			HO 90 U N	
121	150		VERY DARK			HO 90 U N	
121	151		VERY DARK			HO 90 U N	
121	152	MEXICO	GOLFO DE CALIFORNIA-DARK	30.0N 113.0W		70 SW HO 90 U N	71
121	153	MEXICO	GOLFO DE CALIFORNIA	31.5N 112.5W		60 SW HO 90 N N	71
121	154	MEXICO	GOLFO DE CALIFORNIA	32.0N 114.0W		30 S HO 90 N N	71
121	155	USA-CALIFORNIA	SALTON SEA	34.0N 115.5W		30 SW HO 90 N N	71
121	156	USA-CALIFORNIA	MOJAVE DESERT	35.0N 119.0W		20 W HO 90 N N	71
121	157	USA-ALASKA	KODIAK ISLAND	57.0N 153.0W		65 NV 90 N N	70

TABLE A-4.- LIST OF STS 41-G LINHOF PHOTOGRAPHY (Concluded)

ROLL	FRAME	GEO-NAME	FEATURE	CENTER POINT LAT LON	NADIR LAT LON	CCX DR TL FL	E S	DATE	GMT	ALT	NADIR AZI ELE	ORB
121	158	USA-ALASKA	ALASKA PENINSULA	58.5N 158.0W		50 NW	LO 90	N N				70
121	159	USA-ALASKA	ALASKA PENINSULA	57.0N 157.5W		40	NV 90	N N				70
121	160	USA-ALASKA	ALASKA PENINSULA	57.0N 158.5W		50	NV 90	N N				70
121	161	BRAZIL	AMAZON RIVER	1.0S 50.0W		80 SW	HO 90	N N				69
121	162	BRAZIL	AMAZON RIVER	1.0S 49.5W		80 SW	HO 90	N N				69
121	163	USA-NEW HAMPSHIRE	MASSACHUSETTS BAY/BOSTON	43.0N 70.5W		70 NE	HO 90	N N				69
121	164	USA-NEW HAMPSHIRE	MASSACHUSETTS BAY/BOSTON	43.0N 72.0W		70 NE	HO 90	N N				69
121	165	CANADA-O	ST LAWRENCE RIVER	48.5N 70.5W		70 NE	HO 90	N N				69
121	166	CANADA-O	HUDSON BAY	54.5N 88.5W		20 NE	HO 90	N N				69
121	167	CANADA-M	HUDSON BAY	57.5N 83.5W		15 NE	HO 90	N N				69
121	168	CANADA-YT	SAINT ELIAS MOUNTAINS	60.5N 138.5W		70 NW	HO 90	N N				69
121	169	CANARY ISLANDS	GRAN CANARIA/TENERIFE	28.5N 17.0W		40 NW	HO 90	N N				67
121	170	MADAGASCAR	SOUTHERN TIP	24.0S 48.5E		35 NE	HO 90	N N				66
121	171	ALGERIA	STRAIT OF GIBRALTAR	36.0N 2.0W		75 NW	HO 90	N N				66
121	172	ITALY	ADRIATIC SEA	45.0N 11.0E		40 NW	HO 90	N N				65
121	173	ITALY	ADRIATIC SEA	45.0N 11.0E		50 NW	HO 90	N N				65
121	174	OMAN	COASTLINE	17.0N 54.0E		10 SW	HO 90	N N				64
121	175	OMAN	AR RUB AL KHALI BASIN	22.5N 55.5E		1 SW	HO 90	N N				64
121	176	QATAR	PERSIAN GULF	26.0N 51.5E		10 W	HO 90	N N				64
121	177	KUWAIT	PERSIAN GULF	29.0N 49.0E		35 W	HO 90	N N				64
121	178	USSR	CASPIAN SEA/ZAGROS MTHS	40.0N 47.0E		30 NW	HO 90	N N				84
121	179	MEXICO	SIERRA GRANDE	29.0N 106.0W		70	NV 90	N N				55
121	180	USA-NEW MEXICO	RIO GRANDE/WHITE SANDS	32.5N 108.5W		80 SE	HO 90	N N				55
121	181	USA-ARIZONA	GRAND CANYON/LAKE MEAD	36.0N 113.0W		2 SW	LO 90	N N				55
121	182	USA-NEVADA	SOUTHERN NEVADA	38.5N 114.5W		15 S	HO 90	N N				55
121	183	USA-NEVADA	SOUTHERN NEVADA	38.0N 117.0W		10 SW	HO 90	N N				55
121	184	USA-NEVADA	SOUTHERN NEVADA	39.0N 117.0W		5 SW	LO 90	N N				55
121	185	USA-NEVADA	SIERRA NEVADA	40.5N 119.0W		20 SW	HO 90	N N				55
121	186		CLOUDS				HO 90	N N				55
121	187	REPUBLIC SOUTH AFRICA	SOUTHERN COASTLINE	35.5S 23.5E		45 SW	HO 90	N N				51
121	188	REPUBLIC SOUTH AFRICA	CAPE OF GOOD HOPE	35.0S 18.0E		60 SW	HO 90	N N				51
121	189	REPUBLIC SOUTH AFRICA	KALAHARI DESERT	31.0S 21.0E		80 S	HO 90	N N				51
121	190		CLOUDS				HO 90	N N				47
121	191	CHINA	HIMALAYAS	32.0N 80.5E		15 NE	HO 90	N N				47
121	192	NEPAL	HIMALAYAS	28.5N 80.9E		25 E	HO 90	N N				47

APPENDIX B

STS 41-G EARTH OBSERVATIONS PHOTOGRAPHY SUMMARY MAP

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STS 41-G EARTH OBSERVATIONS PHOTOGRAPHY SUMMARY MAP

The Earth Observations Photography Summary Map contains the center point positions and frame numbers, printed in red, for Earth observations photographs acquired on the STS 41-G mission. Nadir latitude and longitude coordinates are shown for photographs that could not be located. These coordinates, printed in blue, reflect the position of the Shuttle Orbiter at the time the photograph was taken. Where a large number of photographs were acquired over a small area, the points are enclosed within a box with the frame numbers bracketed outside; the textual index must be used to obtain the center point latitude and longitude for each individual frame number.

The scale of the map is 1:40,000,000 at the Equator.

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16. Abstract This document catalogs Space Shuttle hand-held Earth observations photography which was collected on the Space Transportation System (STS) 41-G mission of October 1984. The catalog includes the following data for each of 2480 frames: identification number, geographical name, feature description, latitude and longitude, percentage of cloud cover, look direction and tilt, lens focal length, exposure evaluation, stereopairs, and orbit number. The catalog is a product of the Space Shuttle Earth Observations Project, Solar System Exploration Division, Space and Life Sciences Directorate, of the National Aeronautics and Space Administration, Lyndon B. Johnson Space Center.					
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